PETER BENT BRIGHAM HOSPITAL "BOSTON

SEVENTH ANNUAL REPORT

FOR THE YEAR 1920

CAMBRIDGE
THE UNIVERSITY PRESS
1921

FORM OF BEQUEST

I give and bequeath to the Peter Bent Brigham Hospital, a corporation established under the laws of the Commonwealth of Massachusetts, the sum of dollars, the same to be used for the furtherance of its charitable work.

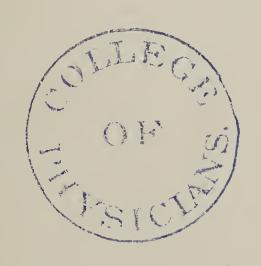


SEVENTH ANNUAL REPORT

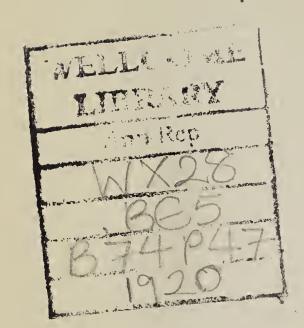
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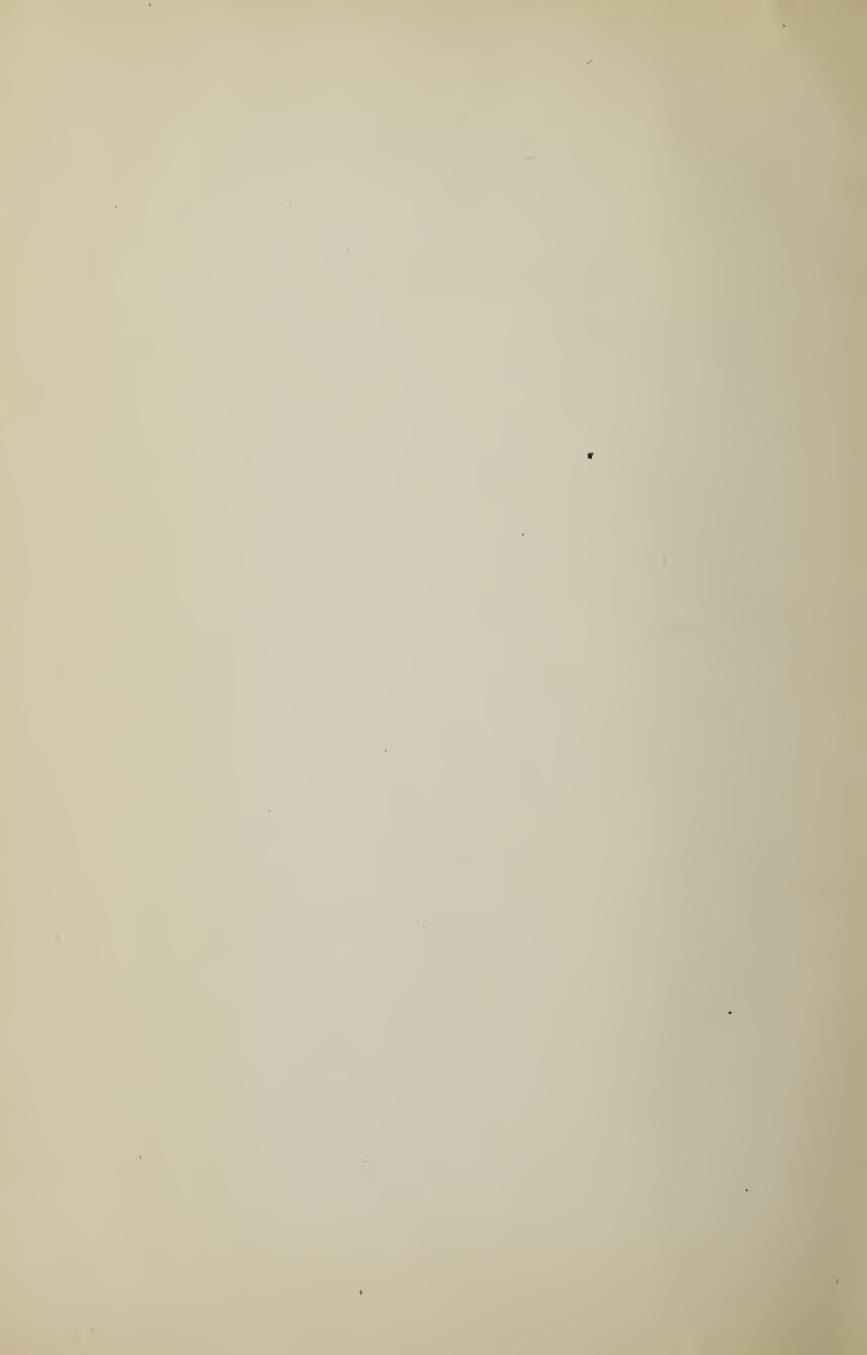


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President's Report

The Trustees regret to record the death of Mr. John Phillips Reynolds, for many years a representative of the State of Massachusetts on their Board. From his first appointment in 1909 until his death in December of this year, during which time he was in active business life, he had the interests of this hospital constantly at heart, and the Trustees feel deeply the loss of his services.

On July 1st of the past year Dr. Conrad Jacobson resigned his office as Resident Surgeon, and has become Associate Professor of Surgery at the Medical School of the University of Minnesota. Dr. Jacobson came to the Peter Bent Brigham Hospital in September, 1912, before the hospital was opened. He served as Assistant Resident Surgeon until September, 1915, when he became Resident Surgeon. The Board of Trustees is grateful to him for his devoted and valuable services.

During the Summer of 1920 Dr. Harvey Cushing, our Surgeon-in-Chief, was granted leave of absence to visit Europe in connection with his invitation to write the biography of Sir William Osler.

In January, 1920, Dr. S. Burt Wolbach, Pathologist to the hospital, was granted leave of absence to serve as the Director of the Typhus Commission to Poland, under the League of Red Cross Societies. The Board of Trustees appreciates the honor done the hospital by this appointment of one of its staff to a position of such great importance not only to the countries afflicted, but to medical science at large.

The use of X-ray in both medical and surgical cases is increasing from year to year. Improvements and ex-

tensions in the hospital's X-ray service have been made during the past year, and the department is now equipped to serve not only the hospital itself, but to receive any outside patients who may be sent by doctors not connected with the hospital.

During the past year the hospital was given by the Surdna Foundation of New York, \$6,000 a year for three years, to be used for a study of chronic eczema. This work is now being carried on under the supervision of Dr. I. Chandler Walker, who has accomplished during the past few years in this hospital valuable results from a similar study of asthma. The Trustees hope that by means of this scientific investigation light may be thrown upon the cause and treatment of this disease.

The hospital has been from the time of its organization equipped to carry on scientific work along medical and surgical lines, and many scientific studies planned long ago, upon which much valuable work has already been accomplished, cannot be carried forward on account of lack of funds. The services of able doctors, well trained and well equipped to conduct such work, can be obtained for a supporting salary at this time. It is the opinion of the staff of the hospital that a gift of \$10,000 per year for five years would be the means of bringing these studies to a successful and valuable conclusion.

A chemistry department is one of the most important needs of the hospital, the lack of which is felt in both the work of caring for the patients and in the scientific study. An endowment of \$300,000 would provide an income sufficient to pay the salary of a trained chemist, assistants, and trained technicians, and to provide chemical supplies and apparatus.

Extensive improvements have been made in the Out-Patient Department during the past year, necessitated by the increasing number of patients. It is perhaps becoming more generally known that the hospital offers to

REPORT OF THE PRESIDENT

the public the unusual privilege of visiting the hospital for treatment at any hour of the day most convenient for the individual patient.

The Board of Trustees appreciates and is grateful for the faithful work that the staff and employees have done during the past year.

C. P. CURTIS,

President.

Boston, December 31, 1920.

MEMORIAL UPON THE DEATH OF

John Phillips Reynolds

JOHN PHILLIPS REYNOLDS of Boston, a Trustee of the Peter Bent Brigham Hospital, died at his home on the 9th of December, 1920.

Mr. Reynolds was appointed a member of this corporation by Governor Draper in 1909, and under successive appointments by Governors of the Commonwealth served in that capacity until his death.

A man intimately associated with the administration of important business enterprises, imbued with a strong sense of civic duty and in the full vigor of middle life, he was admirably equipped to serve this institution, and applied himself with characteristic energy to its affairs.

As Chairman of the Building Committee during the construction of the hospital, he rendered a distinguished and lasting service.

Possessed by inheritance with the best traditions of the medical profession, he took particular interest in the development of the School of Nursing, and established in memory of his father the Dr. John P. Reynolds Gold Medal, to be awarded annually to the most efficient nurse in the graduating class.

His associates, the members of the corporation of the Peter Bent Brigham Hospital, in token of their personal esteem for Mr. Reynolds, of their appreciation of his character and sterling manhood, and in affectionate recognition of his many services to this institution, order this memorial spread upon the records of their first meeting subsequent to his death, and direct that copies hereof be sent to the Executive Committee of the Staff, to the Superintendent of the School of Nursing, and, as an expression of sincerest sympathy, to the members of his family.

Gifts to the Hospital During Year 1920

Jesse Koshland, 501 Summer Street, Boston	\$25.00
Patrick Ford, 13 Lindell Park Street, Roxbury	10.00
An anonymous gift through the Out-Door Depart-	
ment	1.00
Mr. Clement C. Van Laningham, 106 Chester Street,	
Allston	1.00
Mrs. Mary Feeney, 239 Springvale Avenue, Everett	3.43
Jennie E. Noble, 52 Glenville Avenue, Allston	2.00
Committee of the Permanent Charity Fund, Inc.,	
gift to be used for general purposes of the Social	
Service Department	2,500.00
Surdna Foundation, gift for investigation and study	
of Eczema	6,000.00
Legacy under will of Abbie T. Vose, to be used for	·
general purposes of the hospital	2,029.81
Legacy under will of Alexander Cochrane, gift to be	·
known as the Alexander Cochrane Free Bed Fund	10,000.00

Report of the Treasurer

A STATEMENT of receipts of income from investments and of payments therefrom out of the office of the Treasurer for the year ending December 31, 1920, is as follows:

Income	
Real Estate Receipts:	
Rent	\$190,165.25
Taxes paid by tenants	
Insurance paid by tenants	3,627.15 \$218,944.44
Interest on investments:	
On bonds	\$52,840.00
On mortgages	
On notes	
•	\$60,385.40
Dividends	20,389.52 80,774.92
Bank interest	785.92
Total net income	\$300,505.28
Expenditure	ES .
T.	
Taxes	\$67,728.23
Taxes	\$67,728.23 11,407.37
Taxes	\$67,728.23 11,407.37 8,655.27
Taxes	\$67,728.23 11,407.37 8,655.27 7,800.00
Taxes Building repairs, etc. Insurance Salaries Legal expenses	\$67,728.23 11,407.37 8,655.27 7,800.00 2,294.60
Taxes Building repairs, etc. Insurance Salaries Legal expenses Audit	\$67,728.23 11,407.37 8,655.27 7,800.00 2,294.60 450.00
Taxes Building repairs, etc. Insurance Salaries Legal expenses Audit Safe deposit box rent	\$67,728.23 11,407.37 8,655.27 7,800.00 2,294.60 450.00 70.00
Taxes Building repairs, etc. Insurance Salaries Legal expenses Audit Safe deposit box rent Appraising securities.	\$67,728.23 11,407.37 8,655.27 7,800.00 2,294.60 450.00 70.00 25.00
Taxes Building repairs, etc. Insurance Salaries Legal expenses Audit Safe deposit box rent Appraising securities Commission to brokers on leases	\$67,728.23 11,407.37 8,655.27 7,800.00 2,294.60 450.00 70.00 25.00 418.57
Taxes Building repairs, etc. Insurance Salaries Legal expenses Audit Safe deposit box rent Appraising securities Commission to brokers on leases Interest on loans	\$67,728.23 11,407.37 8,655.27 7,800.00 2,294.60 450.00 70.00 25.00 418.57 3,463.90
Taxes Building repairs, etc. Insurance Salaries Legal expenses Audit Safe deposit box rent Appraising securities Commission to brokers on leases Interest on loans Cash book	\$67,728.23 11,407.37 8,655.27 7,800.00 2,294.60 450.00 70.00 25.00 418.57 3,463.90 3.00
Taxes Building repairs, etc. Insurance Salaries Legal expenses Audit Safe deposit box rent Appraising securities Commission to brokers on leases Interest on loans	\$67,728.23 11,407.37 8,655.27 7,800.00 2,294.60 450.00 70.00 25.00 418.57 3,463.90 3.00
Taxes Building repairs, etc. Insurance Salaries Legal expenses Audit Safe deposit box rent Appraising securities Commission to brokers on leases Interest on loans Cash book Revenue stamps.	\$67,728.23 11,407.37 8,655.27 7,800.00 2,294.60 450.00 70.00 25.00 418.57 3,463.90 3.00 2.00
Taxes Building repairs, etc. Insurance Salaries Legal expenses Audit Safe deposit box rent Appraising securities Commission to brokers on leases Interest on loans Cash book	\$67,728.23 11,407.37 8,655.27 7,800.00 2,294.60 450.00 70.00 25.00 418.57 3,463.90 3.00 2.00

REPORT OF THE TREASURER

Net investment income available for operating expenses	
\$281,299.1	.6
Over-expended Permanent Charity	1
Fund	91 \$281,482.07 84,040.24
Reserve income applied	12,010.25
	-
Balance deducted from General Fund	\$72,029.99
Schedule of Property	
Land and buildings occupied for Hospital, in-	
cluding furniture and fixtures	\$1,878,431.22
Mortgages	142,397.46
Notes:	
Edison Electric Illuminating Co., 5 year,	
5%, due February 1, 1922	10,000.00
Land and buildings:	
63 Blackstone Street	59,437.53
166-210 Portland Street	774,166.79
5–11 Tremont Row	493,352.48
224–230 Congress Street	100,493.77
108–114 Lincoln Street	159,618.76
223–225 Washington Street	220,000.00
91–95 Portland Street	75,957.25
67–69 Commercial Street	73,999.76 54,452.51
148–150 Hanover Street	60,787.78
1–7 Sudbury Street	70,159.03
88–92 Court Street	171,695.71
94–8 Arch and 13–17 Otis Streets	168,318.16
Land cor. Albany and Dover Streets	110,221.90
1000 Shares Boston & Maine R. R. Co. pfd. A.	142,000.00
Amount carried forward	\$4,765,490.11

Amount brought forward	\$4,765,490.11
100 Shares Boston & Albany R. R. Co	25,800.00
524 Shares Vermont & Mass. R. R. Co	91,700.00
450 Shares Old Colony R. R. Co	93,150.00
183 Shares Nashua, Acton & Boston R. R. Co.	183.00
300 Shares State Street Exchange	25,960.00
400 Shares Boston Wharf Co	37,585.25
50 Shares Boston Real Estate Trust	58,514.25
30 Shares Constitution Wharf Trust (in	00,022.20
liquidation)	1,230.00
150 Shares Hotel Trust (Touraine)	15,900.00
100 Shares South Terminal Trust	10,300.00
15 Shares National Union Bank	2,700.00
100 Shares Newport & Fall River Street Rail-	,
way Ĉo	13,278.33
1000 Shares Berkeley Hotel Trust	65,000.00
300 Shares N. Y. Central & Hudson River	·
R. R. Co	30,189.50
100 Shares Chicago, Milwaukee & St. Paul	
R. R. Co	14,760.70
220 Shares Pennsylvania R. R. Co	11,731.88
1500 Shares New York, New Haven & Hart-	
ford R. R. Co	28,500.00
\$150,000 American Telephone & Telegraph Co.	
4% bonds, 1929	139,887.50
60,000 Portland & Ogdensburg R. R. Co.,	20 244 24
$4\frac{1}{2}\%$ bonds, 1928	60,644.61
\$25,000 Long Island R. R. Co., Gold Deben-	24.000.00
ture 5% bonds, 1934	24,000.00
5,000 Kansas City Memphis Ry. & Bridge	5 066 27
Co., 5% bonds, 1929	5,066.37
100,000 Chicago, Burlington & Quincy R. R. Co., Ill. Div., $3\frac{1}{2}\%$ bonds, 1949	89,077.50
20,000 Washington Water Power Co., 5%	09,011.30
bonds, 1939	20,309.13
50,000 Boston & Maine R. R. Co., 4½%	20,000.10
bonds, 1929	51,214.27
50,000 Interborough Rapid Transit Co., 5%	01,211.27
bonds, 1966	49,500.00
Amount carried forward	\$5,731,672.40

REPORT OF THE TREASURER

Amount brought forward	\$5,731,672.40
R. R. Co., 5% bonds, 1934 25,000 Baltimore & Ohio R. R. Co., So. West-	53,617.31
ern Div., $3\frac{1}{2}\%$ bonds, 1925 25,000 N. Y. Central & Hudson River R. R.	22,125.00
Co., 1st mortgage, $3\frac{1}{2}\%$ bonds, 1997 50,000 Cleveland, Loraine & Wheeling R. R.	21,875.00
Co., 5% bonds, 1933	53,223.15
Co., Debenture, 4% bonds, 1934. 25,000 Northern Pacific R. R. Co., Prior	23,937.50
Lien, 4% bonds, 1997	24,781.25 24,718.75
52,500 Eastern Mass. Street R'y Co., Refund-	4
ing mortgage, $4\frac{1}{2}\%$ bonds, 1948 \$25,000 Quincy Market Realty Co., 5% bonds,	43,250.00
1964	25,000.00
Co., Extension 4% bonds, 1926 28,000 General Electric Co., $3\frac{1}{2}$ % bonds,	72,750.00
3,000 Pennsylvania R. R. Co., 4% bonds,	23,170.00
1948	2,880.00
Co., Transcontinental Short Line 4% bonds, 1958	47,500.00
56,800 Pere Marquette Ry. Co., 5% first mortgage bonds, 1956	49,420.00
50,000 Illinois Steel, 4½% bonds, 1940 15,000 Boston & Albany R. R. Co., Equip-	47,375.00
ment, $4\frac{1}{2}\%$ bonds, 1924	14,811.00
ment, $4\frac{1}{2}\%$ bonds, 1925 5,000 Boston & Albany R. R. Co., Equip-	14,803.50
ment, $4\frac{1}{2}\%$ bonds, 1926 15,000 Boston & Albany R. R. Co., Equip-	4,932.50
ment, $4\frac{1}{2}\%$ bonds, 1927 50,000 Liberty Loan, $4\frac{1}{4}\%$ bonds, 1928	14,793.00 50,000.00
50,000 Liberty Loan, $4\frac{1}{4}\%$ bonds, 1938	50,000.00
Amount carried forward	\$6,416,635.36

Cash: Operating Expense Fund \$20,000.00	
The contract of the contract o	
Less overdraft at banks 8,938.84	\$11,061.16
Superintendent's Inventories	44,147.00
Less Notes payable	\$6,471,843.52 90,000.00
Dess reces payable	
	\$6,381,843.52
Included in the above Schedule of Property are the following special Funds:	
CHOATE FUND \$151.46	
Less amount expended . 151.46	
COMMITTEE OF THE PER-	
MANENT CHARITY EURD Inc. 2 180 21	
Fund, Inc 3,189.31 Amount expended 3,372.22	
Amount expended 3,372.22	
Over-expenditure car-	
ried to General	
Fund 182.91	
Surdna Foundation	
Fund 6,000.00	
Less expended 4,635.52 \$1,364.48	
JOHN P. REYNOLDS MEMORIAL FUND 1,000.00	
HEMENWAY SQUASH COURT 11,050.00	
Surgical Dressing Fund — Donation from the New England Sur-	
gical Dressing Committee 10,000.00	
Training School Deposit Fund . 1,750.00	
ALEXANDER COCHRANE FREE BED	
Fund	35,164.48
<u> </u>	\$6,346,679.04

EDMUND D. CODMAN,

Treasurer.

Report of the Superintendent

During the past year 69,541 patients days' treatment have been given as compared with 65,546 patients days' in 1919. 1417 more days of free care were given than in the previous year. There were treated 231 more new patients in the Out-Door Department, although the number of visits to the department for the year was 400 less than last year.

The daily per capita cost covering all departments of the hospital increased from \$5.76 in 1919 to \$6.53 this year. Excluding the private ward and the Out-Door Department the daily per capita cost this year was \$5.40.

In the Dietary Department eleven student dietitians have received training. 6,020 special diets have been prepared in the Diet Kitchen. The daily per capita cost of uncooked food for this year was \$.59, \$.08 more than last year.

Table I on Page 15 and Table II on Page 19 give additional comparative costs and statistics of interest.

The return of influenza during January and February found us better prepared by the experience of the previous year to care for these patients. The admission of influenza cases, excepting those coming through the Out-Door Department, was through a central bureau at the Office of the City Board of Health, and as that bureau received a daily census report from all the principal hospitals of the city, distribution of the sick was made with

due regard to nearness to home and to the possibilities of a hospital being already overcrowded. Fortunately the epidemic was less severe than was feared it might prove. During the first two weeks of February, admission of patients was limited to emergencies unless suffering from influenza. No visitors were admitted except to the dangerously ill. Pavilions E and F (medical) were given up to these cases, and all other medical patients were cared for together with the surgical cases in Pavilions C and D (surgical). There were admitted during the epidemic 206 cases of influenza and broncho-pneumonia.

On April 22 it became necessary, owing to increased operating costs, to increase the ward rates from \$17.50 per week to \$21 for those living in Suffolk County, and able to pay. For those living outside of Suffolk County the rate was increased from \$21 per week to \$24. On May 29, for the same reason, the fee for admission to the Out-Door Department was increased from twenty-five cents to fifty cents. At the same time, in order that none unable to pay the new rate might suffer, a new worker was placed in the department to make sure by investigation that the income of the family from which the applicant came was such that a fee should be paid for admission. The system has worked satisfactorily. Twenty-one per cent of the patients were treated free and many given a reduced rate.

Much repair work delayed by unsettled conditions has been completed during the year. Part of the ground floor of the Out-Door Department set apart for hydrotherapy has been made into examining rooms for women surgical patients, thus giving them entirely separate examining and treatment rooms. On the main floor, the quarters of the Urological Department have been much enlarged by the removal of partitions and making a large covered veranda, wholly unused, into a treatment room for men and a teaching room for students.

A new entrance for emergency cases, leading directly to rooms set apart for their care, has been made in the Out-Door Department.

The roof ward of Ward A has been removed and a new story added, thus giving us thirteen more rooms for private patients. It was completed the last day of the year.

Electric lights have been substituted for gas lights in the houses used for nurses on Wigglesworth Street, and the old zinc bathtubs have also been replaced with modern ones.

In February the pupils in the School of Nursing were placed fully on an eight-hour schedule. Eight-hour duty gives more time for study and recreation and the health of the pupils has been better under the shorter working day.

Dr. Dean Lewis of Chicago, who was appointed Temporary Surgeon for two weeks last March, returned the honorarium given him, with the request that it be used for the benefit of the Resident Staff. A silver cup was purchased, named the "Dean Lewis Cup," to be competed for annually in a handicap tennis tournament and a squash racquet tournament. The competitions have stimulated healthful exercise of the house staff and lively interest in the tournaments.

I wish to emphasize by repetition our most pressing needs as stated in my report of last year. Many of our nurses continue to live in the two houses on Wigglesworth Street and in a dormitory in the Out-Door Department Building, both very unsuitable for the purpose. The crowding in the residents' quarters needs relief as soon as possible. In considering new building we must take into account the growing needs of the Roentgenological Department. As our realization of the value of the work of this department increases, the need for more space for apparatus, waiting and dressing rooms, for the

13

increasing number of patients sent for examination and treatment becomes apparent. 764 more patients were seen in this department in 1920 than in 1919. 565 more treatments were given in the same period.

JOSEPH B. HOWLAND, M.D., Superintendent.

DECEMBER 31, 1920.

Comparative Tables of Statistics

Table I

Hospital Wards and Single	Rooms	
	1920	1919
Patients in hospital first of year:		
Medical	79	83
Surgical	90	79
Total	169	162
IOtal	109	102
Patients admitted during the year:		
Medical	2,446	2,411
Surgical	1,870	1,871
Total	4,316	4,282
Patients treated in hospital wards and private rooms during the year: Medical	2,525 1,960	2,494 1,950
Total	4,485	4,444
Patients discharged during the year: Well	756 2,669 260 337 263	1,533 1,828 175 486 253
Total	4,285	4,275

1	920 1919
Patients in hospital end of year:	
Medical	86 79
Surgical	114 90
Total	200 169
Total patients days' treatment:	
Paying patients 42,6	39,919
	388 11,503
	541 14,124
Total	541 65,546
Parcentage	
Percentage:	1+ 61+
V 0 1	5+ 18-
1 7 8 1	
Free patients	2+ 22+
Total	0 100
Average petients nor days	
Average patients per day: Paving patients	7- 109+
- 7 6 P	1+ $32-$
	32 - 39 - 39 - 39 - 39 - 39 - 39 - 39 -
Free patients	39=
Total	1- 180-
Arrange time nor nations in hospital 16 L. de	ays 15+ days
	3- \$5.76-
Daily average cost per patient \$6.53 Daily cost per capita for provisions for	φ3.70—
	951-
all persons supported	.51—
	746 2 000
· · · · · · · · · · · · · · · · · · ·	746 3,008
_ , 0	578 463
Free	992 811
Total 4,3	316 4,282

Out-Door Department

192	0 1919
Number of cases treated (new cases) . 7,86	2 7,631
Medical 4,09	•
Surgical	
	9 8
Urological	4 248
Number of visits	2 49,972
Medical	8 19,956
Surgical	7 25,023
	9 42
Urological 4,63	8 4,951
Patients arrived:	2 12 707
A. M. 8–10	•
10–12	· ·
Р. м. 12— 2	•
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
3-4	· ·
4-6	4,043
Total	49,972
Cost of maintenance of Out-Door De-	
partment	3 \$20,557.07
Daily average cost per patient	+ .41+
Ambulance	
Ambulance calls during the year 701	755
Average calls per day 1.92-	
Mileage for patients 4,239	
Other business	
Total mileage 6,708	6,679

X-Ray

	1920	1919	1920	1919	1920	1919
	No. o	f Patients	No. of Plat	tes No.	of Treat	ments
January	 462	408	844	896	15	0
February .	 349	353	558	903	20	1
March	 561	403	968	1,055	36	3
April	 521	425	732	906	61	0
May	 541	484	782	950	55	0
June	 607	470	753	862	90	1
July	 454	504	481	1,012	21	0
August	 526	481	361	877	73	0
September.	 607	461	343	798	78	0
October	 597	533	487	886	68	4
November .	 557	538	457	975	52	18
December .	 582	540	414	947	40	17
Total .	 6,364	5,600	7,180	11,067	609	44

Table II

	Average cost per visit		.33+	.33+	.35	.36—	.43-	.41+	+05.
EPARTMENT	sisiV		30,434	36,523	47,687	53,405	45,153	49,972	49,572
OUT-DOOR DEPARTMENT	New cases treated		8,347	8,536	9,810	10,995	7,952	7,631	7,862
	-nism to teoO sonsnet		\$10,081.39	12,108.39	16,551.07	19,140.56	18,989.10	20,557.07	25,033.43
cap- snoi	Daily cost per per per person	.53—	.35—	.33+	.35—	-04.	-44-	.51	.59
r day	Average cost pe per house patie	\$7.02-	5.15+	4.48	4.72-	4.93+	4.81	5.76-	6.53-
и	Average stay i fistiqeod	27,157 20—days	17+ "	18- "	18- "	18- "	17- "	15+ "	16+ "
-ta	Total days' tre	27,157	49,295	60,242	65,291	65,129	699'99	65,546 15+	4,316 69,541 16+
-timit	No. patients ac	1,370	2,843	3,417	3,712	3,674	4,025	4,282	4,316
	Receipts	\$36,571.58	69,251.23	88,651.55	116,519.00	138,512.48	154,026.47	193,741.63	453,853.94 262,413.29
	Expenses	\$190,510.41	256,423.25	269,913.46	308,413.81	324,777.80	321,547.28	377,253.15	453,853.94
	Хезг	1913	1914	1915	1916	1917	1918	1919	1920

Table III

Residences

Alabama 2 Arizona 1 California 4 Colorado -1 Connecticut 28 Dakota 1	2 4 23 1 3 3 2
California	4 23 1 3 3 2
California 4 Colorado 1 Connecticut 28	4 23 1 3 3 2
Colorado	23 1 3 3 2
	 1 3 3 2
Dakota	3 3 2
	3 3 2
Delaware	3 2
District of Columbia	2
Florida	
Georgia	
Indiana	3
Illinois	8
Iowa	4
Kansas	3
Kentucky	1
Louisiana	
Maine	51
Maryland	4
Massachusetts (except Boston) 1,270 1,2	282
_	637
Michigan	1
Minnesota	
Mississippi	2
Missouri	3
Montana	• •
Nebraska	
New Hampshire	87
New Jersey	9
New York	34
North Carolina	4
North Dakota	1
Ohio	14
Oklahoma	4
Carried forward $\ldots \ldots \ldots$	100

		1920 1919
Brought forward		4,210 4,190
Oregon		1
Pennsylvania		7 10
Rhode Island	• •	22 21
South Carolina		3
Tennessee		1 1
Texas		3 5
Vermont		20 15
Virginia		8 5
Washington		1
West Virginia		1
Wisconsin		1
Wyoming		2
Canada		32 26
China		1 1
Cuba		2
England		1 3
Holland		1
Italy		1
Japan		2
Philippine Islands	• •	1
Total		4,316 4,282

Table IV

Birthplaces

== == F=== F=== F=== F=== F=== F=== F=		
	1920	1919
Alabama	5	3
Arkansas	1	4
California	15	9
Colorado	7	1
Connecticut	53	60
Delaware	• •	4
District of Columbia	4	2
Florida	2	2
Georgia	19	5
Idaho		1
Illinois	37	30
Indiana	21	7
Iowa	22	12
Kansas	1	8
Kentucky	6	10
Louisiana	2	3
Maine	175	176
Maryland	2	12
Massachusetts (except Boston)	1,376	1,364
Boston	124	145
Michigan	12	4
Minnesota	12	6
Missouri	7	7
Mississippi	4	3
Montana	5	1
Nebraska	4	2
NT J	1	1
NT TT 1:	188	183
NT T	22	14
** ***********************************	<i></i>	2
NT O1	1	
NT	148	156
New York	140	130
Carried forward	2,276	2,237

	1920	1919
Brought forward	2,276	2,237
North Carolina	28	16
North Dakota	1	1
Ohio	35	39
Oklahoma	1	1
Pennsylvania	38	38
Rhode Island	47	38
South Carolina	18 -	17
Tennessee	3	12
Texas	4	2
Utah	2	2
Vermont	60	71
Virginia	35	31
Washington	1	2
West Virginia	1	1
Wisconsin	8	11
Total Americans	2,558	2,519
Africa	2	1
Arabia	2	2
Armenia	25	50
Asia	1	
Australia	2	• •
Austria	19	26
Azores	3	
Belgium	4	5
Bohemia	4	
Canada	363	400
China	6	1
Cuba	3	2
Denmark	9	3
Egypt	• •	10
England	110	87
Finland	4	3
France	17	4
Germany	45	56
Greece	67	76
Carried forward	684	726

	1920	1919
Brought forward	684	726
Holland	. 9	2
Hungary	. 3	4
India	2	• •
Ireland	303	331
Italy	117	125
Japan	7	
Mexico		2
Norway	. 26	7
Philippine Islands	. 3	• •
Poland	. 13	
Portugal	. 1	2
Prussia	• •	2
Roumania	5	6
Russia	426	405
Scotland	47	37
South America	• •	1
Spain	• •	3
Sweden	76	54
Switzerland	3	4
Syria	10	7
Turkey	8	20
Wales	3	13
West Indies	12	12
Total foreigners	1,758	1,763

Table V

Expense and Revenue Statement

Administration Expenses

1920

1919

Salaries, officers and clerks . Office expenses	\$23,698.94 130.37		\$22,062.22 19.64	
Stationery, printing and post-				
age	9,327.14		5,106.81	
Telephone and telegraph	6,133.84		5,407.08	
Liability insurance	2,162.82		1,571.84	
Miscellaneous	2,528.37		1,238.06	
Total administration ex-		642 001 40		62
penses		\$43,981.48		\$3 5,405.65
Profession	IAL CARE	e of Pat	ENTS	
Salaries and wages:				
Physicians and surgeons	\$19,129.90		\$18,196.55	
Supt. of nurses and assistants	, 5,598.27		5,709.08	
Nurses	9,448.26		7,788.12	
Special nurses	29,539.06		17,262.92	
Orderlies	4,884.48		5,029.09	
Druggists	3,077.57		2,882.90	
Ward employees	6,778.64		5,967.25	
Clerks	9,540.51		8,905.04	
Instrument repairs	696.34		112.50	
		\$88,693.03		\$71,853.45
Training school:				
Salaries of instructors			\$3,312.77	
Supplies	4,882.24	# 0# 4 00	3, 316.58	
		7,974.22		6,629.35
Medical and surgical supplies:	84 848 94		64 477 47	
Apparatus and instruments	\$1,717.31		\$1,477.47	
Medical and surgical supplies	20,302.79		12,745.09	
Alcohol, liquors and wines	732.03	00 750 12	713.38	14.025.04
O-4 D D		22,752.13		14,935.94
Out-Door Department:	MC 060 27		6 6 020 64	
Wages	\$6,868.37		\$6,029.64	
Supplies	6,283.28	13,151.65	6,473.17	12,502.81
Carried forward		3132,571.03		\$105,921.55
Garriea jorwara	25	,102,071.00		w100,721.00

	1920		1919	
Brought forward	\$	\$132,571.03		\$105,921.55
X-ray Service and Photography	•			
Salaries and wages	\$5,320.05		\$5,583.15	
Supplies	8,151.67		7,173.24	
		13,471.72		- 12,756.39
Library		800.00		809.44
Total professional care of				7440 405 60
patients		\$146,842.75		\$119,487.38
DEPAI	RTMENT]	Expenses		
Ambulance:				
Labor	\$2,469,23		\$2,269.49	
Supplies			1,002.88	
copping		\$5,569.32		\$3,272.37
Laboratories:		# c, c c z c c z		# -)
Labor	\$ 10 682 00		\$10,904.58	
Supplies			3,805.04	
buppines	4,190.00	14,878.20		14,709.62
Housekeeping:		11,070.20		11,707.02
Labor	\$27 641 77		\$24,039.56	
Supplies			9,383.35	
Supplies	10,515.00	44,155.63		33,422.91
Kitchen:		44,100.00		00,122.71
	@11 201 6E		CO 711 19	
Labor	778.39		\$9,744.48 1,157.74	
Supplies	110.39	12,100.04	1,137.74	10,902.22
T 1		12,100.04		10,902.22
Laundry:	#0 252 0A		67.047.42	
Labor	\$8,353.80		\$7,247.43	
Supplies	2,412.68		2,463.04	0.710.47
		10,766.48	Ÿ.	9,710.47
Steward's department:				
Labor	\$3,055.50		\$2,501.92	
Provisions:	4 500 00		4.044.00	
Bread	4,728.93		4,014.23	
Milk and cream	20,972.59		19,562.91	
Groceries	22,179.95		16,354.34	
Butter and eggs	16,140.66		15,132.54	
Fruit and vegetables	12,825.77		10,092.66	
Meat, poultry, and fish .	24,473.33		23,688.12	01 246 72
		104,376.73		91,346.72
Total department expenses		\$ 191,846.40		\$163,364.31
Total acparement expenses	0.0	w171,010. 1 0		\$100,001.01

GENERAL HOUSE AND PROPERTY EXPENSES

	1920	1919	
Electric Department	\$3,792.75	\$3,501.1	5
Heat, light, and power	40,609.14	30,000.0	0
Fuel	576.70	278.7	5
Gas	3,551.08	2,888.50	0
Ice			
Insurance	1,841.99		
Water	3,076.08		
	3,070.00	7,107.7	0
Maintenance, real estate and	10 427 90	12 101 2	2
buildings	12,437.82	13,121.3	3
Maintenance, machinery and	454.50		^
tools	174.79		
Plumbing and steam fitting .	5,122.96	4,811.8	3
Total assembly house and			-
Total general house and		ው 71 102 21	ØEO 224 01
property expenses		\$71,183.31	\$59,234.81
F		173	
LXPENSES	FROM SI	PECIAL FUNDS	
John P. Reynolds Memorial			
		\$44.7	5
Fund		"	3
Surdna Foundation			•
Asthma Fund	151.46	· · · · · · · · · · · · · · · · · · ·	
Permanent Charity Fund	•	·	
Training school deposit fund.	550.00	50.00)
Total expense from Special Funds	9	\$8,709.20	\$7,190.71
Total expense from Special Lunds	3	ΨΟ,107.20	ψ/,1/0./1
Corpo	RATION	Expenses	
	#4 000 00	** ** ** ** ** ** ** **	^
Salaries, officers and clerks	\$1,000.00	\$1,000.0)
Stationery, printing and postage			•
Miscellaneous	1,811.99		•
Pension	3,600.00	2,400.0	0
Total companying and		#6 411 00	- #2 400 00
Total corporation expenses		Φ0,411.99	\$3,400.00
Additional payment on heat,		400 460 00	#0F 000 00
light, and power		\$88,162.29	\$25,000.00
Capital expenditures		\$5,371.24	\$3,535.56

SUMMARY

EXPENSES

	EJILI IJI(O	20	1920	1919
Total administration expenses .			\$43,981.48	
Total professional care of patient			146,842.75	
Total department expenses			191,846.40	•
Total general house and property			71,183.31	59,234.81
Total hospital expenses			\$453.853.94	\$377,492,15
Corporation expenses			6,411.99	
				\$380,892.15
Capital expenses			5,371.24	. ,
Capital expenses	• • • •			
0 1179 1			\$465,637.17	\$384,427.71
Special Funds:				
Choate Fund			151.46	,
Training school deposit fund	1		550.00	
John P. Reynolds Memorial	Fund.	• • • • •	2 270 00	
Permanent Charity Fund .	• • • •	• • • • •	3,372.22	
Surdna Foundation	• • • •	• • • • •	4,635.52	
A 1 1 1			" /	\$391,618.42
Additional payment on heat, ligh	nt, and po	wer	88,162.29	25,000.00
GRAND TOTAL			\$562,508.66	\$416,618.42
	REVEN	110		
	ICEVEN	1920		1919
Administration receipts		\$1,751.73	3	\$2,391.15
Professional care of patients:	• • • •	Ψ1,101.11		w= ,000 2020
	556,180.27		\$43,787.83	
	05,997.67		92,548.33	
	35,176.03		18,827.49	
Out-Door Department	22,236.70	·	13,772.35	
	17,839.38		9,956.01	
Miscellaneous	19,229.28		9,776.30	400 440 44
Donostmont serieta		256,659.33	3 ——	188,668.31
Department receipts:	62 257 50		#4 020 00	
70 77 44	\$3,257.50 744.73	#4.002.2	\$1,939.28	6 2 692 17
Miscellaneous	144.13	\$4,002.23	3 742.89	\$2,682.17
Total hospital receipts	•	\$262,413.29)	\$193,741.63
Cash from Treasurer:		, ,		
Current Expenses \$2	86,014.93		\$212,195.27	
Choate Fund	151.46		4,351.30	
Training School Deposit				
Fund	550.00		50.00	
Permanent Charity Fund .	3,372.22		2,744.66	
Surdna Foundation	4,635.52			
Ward A Alterations	310.12		3,535.56	
Out-Door Department Alter-	5 061 10	200.005.05	7	222 076 70
ations	5,061.12	300,095.37		222,876.79
GRAND TOTAL		\$562,508.66		\$ 416,618.42
	28			

STATEMENT OF STOCK ON HAND

Administration supplies	13,887.16	13,080.02 21,653.94
	\$44,147.00	\$39,431.23

Report of the School of Nursing

The year ends with the following enrollment of graduate and pupil nurses:

Superintendent of Nurses	1
Assistant Superintendent of Nurses	1
Instructors	2
Supervisors	4
Night Supervisor	1
Graduate Head Nurses of Wards and Assistants	
in Departments	8
Graduate Nurse Anaesthetists	2
Masseuse	1
	86
Affiliated Pupils Army Nursing School	7
Extended Probation	3
	$\overset{\circ}{24}$
Total	40

The great problem in the hospital and nursing world since the war has been the shortage of nurses, both graduates and pupils. In many hospitals this has caused very great hardships. Not infrequently the work of the hospital has had to be curtailed, wards closed, number of admissions restricted or a group called attendants employed. This school has been fortunate in feeling this scarcity of nurses only slightly. The total enrollment numbers three less than last year. Forty-three probationers have been admitted. Twenty-eight have been accepted into the school. Three are on extended probation. Nineteen pupils have withdrawn. Twenty-five have completed their courses, making the total number of graduates 126.

REPORT OF THE SCHOOL OF NURSING

One of the greatest steps forward during the year has been the establishment of an eight-hour day. With the exception of the war period, the school has always maintained an eight-hour day schedule for pupil nurses, but it is only since February, 1920, that the school has been able to install an eight-hour night duty. Owing to the increased amount of time thus provided for recreation and for study, especially for night nurses, an increase in the quality of both theoretical and practical work is anticipated, and a much better health record.

Affiliation with the Army School of Nursing has continued to the end of the year, thereby helping to make the eight-hour system possible.

Owing to the prevalence of influenza during the first three months of this year and the complications accompanying it, the record of illness is very large, totalling 1,852 days.

Scholarship funds have been established by the Corporation, allowing one hundred dollars to six second-year students and one hundred dollars to six third-year students annually. Application may be made for these after acceptance into the school.

Affiliation with the School of Public Health Nursing conducted jointly by Simmons College and the Instructive District Nursing Association provides a five-year program in nursing, leading to the degree of Bachelor of Science from Simmons College, the diploma of this School of Nursing and upon completion of state registration, to a certificate in public health nursing for those students who have elected to specialize in that branch of work during their fifth year. For admission to this course, students must satisfy the entrance requirements of Simmons College and also be adapted to professional nursing.

Affiliations for preparation in Public Health Nursing have been increased to twelve pupils annually for

four-month courses in the School for Public Health Nursing.

Housing conditions have been slightly improved by the installation of electric lights and renovation of the plumbing in the Wigglesworth Street houses. The capacity has not been increased, and the need for better quarters is as great as last year.

Many changes have taken place on the staff. Leone N. Ivers, assistant superintendent of nurses, withdrew in June to study at Teachers' College, Columbia University. Mabel McVicker, Peter Bent Brigham Hospital, 1918, is now assistant superintendent of nurses; Mildred Constantine, Peter Bent Brigham Hospital, 1918, Instructor in Theory; Helen M. Blaisdell, Peter Bent Brigham Hospital, 1918, Instructor in Practice; Anna G. McKeon, Peter Bent Brigham Hospital, 1916, Surgical Supervisor; Martha Ruth Smith, Peter Bent Brigham Hospital, 1919, Medical Supervisor; Nellie V. Porter, Peter Bent Brigham Hospital, 1919, Night Supervisor; Marguerite Robb, Peter Bent Brigham Hospital, 1918, Supervisor of the Operating Rooms; Lila M. Dalrymple, Peter Bent Brigham Hospital, 1918, Supervisor of Out-Door De-Most of the remaining executive nursing positions in the hospital are now held by graduates of this School.

Coöperation on the part of the resident staff of physicians and surgeons for the care of sick nurses and for continued interest and thorough work in the lecture courses to second-year students is recorded with grateful appreciation.

Exercises for the sixth graduating class were held December 3 in the lecture room. Dr. Howland, Superintendent of the höspital, presided. Dr. Winford H. Smith, Superintendent of Johns Hopkins Hospital, Baltimore, gave the address. There were thirty-one graduates. The Dr. John P. Reynolds Gold Medal for

REPORT OF THE SCHOOL OF NURSING

efficiency was awarded to Agnes Gelinas. Mr. John P. Reynolds, the donor, was present, and personally presented the medal. In his untimely death, which occurred the following week, the School of Nursing has lost a warm friend and loyal supporter.

CARRIE M. HALL,

Superintendent of Nurses and Principal of School of Nursing.

December 31, 1920.

Social Service

In the following tables of classification of patients referred to the Social Service Department it is interesting to note that the work of the Department has been so closely allied with that of Public Health. Three-fourths of the 1,244 patients referred were medical problems; also under the heading of Public Health belonged the 2,146 patients followed up by letter and postal cards, and the 722 patients conducted to the Admitting Office to make sure that they arranged for operation or treatment before leaving the Out-Door Department.

The health of the patient was the principal consideration in the Heart and Diabetic Clinics, although anything in the social background which adversely affected the patient's health was removed, if possible, or adjusted.

Fundamentally the 209 patients referred for medical treatment was a public health problem; this group consisted of patients who required some persuasion, advice, or help in overcoming a minor obstacle, in order to get them to have medical treatment.

Providing convalescent, sanatorium, and permanent care affects the public health by making the patient better fitted to return to work, by protecting the health of the patient's family, and by moving the patient on from this hospital, thus making available more beds for the acutely ill, and relieving the family of a factor which might easily break down the health of some other member.

One-fourth of the patients referred presented problems which were essentially social, yet these had their medical aspect as in most cases the health of the family depends on the social well-being of its members. Undoubtedly in the coming year hospitals and dispensaries may expect a

SOCIAL SERVICE

considerable increase in the number of patients attending their clinics which will last until the present crisis of unemployment is over.

Last May the Out-Door Department fees were increased to fifty cents, and as it was thought this might deter some patients from having needed treatment, Social Service offered to inquire into the financial condition of each patient, and reduce or make free those who could not afford to pay the new fee.

Of the total number seen from May to January the fees of about 24 per cent were reduced — of these 14 per cent were made free. In November the percentage of those receiving reduction began to increase; during the summer this percentage was as low as 12 per cent for both reduced and free. At the same time a study was made which will be published later. Perhaps the most striking situation revealed by this study was the fact that of the 800 patients who were unable to pay the new fee only 12½ per cent had any savings, and these were small; neither had most of them any debts, they were living on the brink of what might mean pauperism should sickness or unemployment overtake them.

Heart Clinic. Mrs. Cheley reports: "An attempt has been made in the Cardiac Clinic this year to follow the plans of the Cardiac Clinic at St. Luke's Hospital in New York City. Following these plans a school card has been incorporated into Social Service record containing the necessary information regarding the child's life at school, namely, the number of flights of stairs, the amount and kind of exercise required and the distance the child has to go to school and the means of getting there. With these facts before him the doctor can more intelligently direct the child in his activities.

"We have also considered classifying the members of the clinic according to a classification based on that used by the St. Luke's Clinic. But this has not been wholly

practical for several reasons: first the size of the clinic which comparatively speaking is small, having a membership of around fifty-six with an average of seven to eight patients at a meeting; and second the variation in the membership added difficulties, the clinic being composed of both adults and children of twelve years and older. Also the subject of graduated exercise was taken up, but it, too, seemed impractical owing to the smallness of the group which might be benefited by the exercises.

"Much time and effort has been given by the Social Worker to the follow-up work of seeing that patients report for examination at regular intervals which vary with each case. Also the mothers of the younger members of the clinic are encouraged to come with them and in this way the social worker has been able to enlist their co-operation and interest.

"A splendid opportunity for meeting and becoming acquainted with the patients is afforded the Social Worker as she sees all the patients and directs the Cardiac functional tests which are used in our clinic. She also visits in the homes and the schools to become acquainted with conditions there, and assists the doctor by seeing that his instructions to the patients are carried out. She arranges for care of children while the mother is in the hospital, and for long periods of convalescence or much needed vacations in the country."

DIABETIC CLINIC. Mrs. Mark reports: "The Diabetic Class has been continued during the past year in very much the same way as in previous years. The class meets once a week, under the direction of a doctor and a social worker, an average of six or seven patients being seen in an afternoon.

"The social worker in the clinic is the assistant who keeps the attendance, makes the tests for glucose, diacetic and acetone, or albumen in the urine, and assists the doctor in the regulation of the diet.

"She also meets the patients, teaches them how to test for glucose in urine so that they keep daily watch of their own condition, helps them to interpret the doctor's directions regarding diet, sends follow-up letters to patients who have failed to report at the stated time, and calls at their homes whenever conditions seem to indicate the necessity. In general she takes a friendly interest in all the members of the class, and constitutes the one unvarying part of the constant, yet constantly varying whole."

Occupational Therapy has been carried on except for a few months last summer when it was discontinued for lack of funds. There were 256 patients taught basketry, wood-carving, and many other kinds of handicraft. Very good results were obtained, and since November 1 about one-third of the patients were referred by the doctors for occupational therapy as a definite therapeutic measure, which is the aim of Occupational Therapy.

The American Red Cross Society rendered the same inestimable service through its Women's Motor Department, as in the past three years. About two hundred and fifty trips were made in bringing patients in for treatment, or taking them from the hospital to their homes. Mrs. William G. Nickerson lent her automobile to this Department for the same purpose, and about one hundred trips were made with it. We wish to express our appreciation for this service.

In December this Department joined the Boston Council of Social Agencies, which has been organized to "bring about the most productive use and development of the city's resources in equipment, money, and expert advice to meet the city's social needs."

Another gift of \$2,500, from the "Committee of the Permanent Charity Fund, Incorporated," was received for the work of the past year, for which the Social Service Department wishes to express its sincere appreciation.

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Christmas festivities for the patients in the wards were arranged the past Christmas by the wives of the House Officers under the direction of Mrs. Harvey Cushing and Mrs. Eliott Cutler. Beautifully trimmed trees were supplied for each ward, with gifts of flowering plants, cigarettes, and toys. Dr. Cheley in the guise of Santa Claus created great fun for the patients.

As in the past years the Social Service Department takes this time to make especial mention of the admirable coöperation of the charitable agencies in Boston and to thank the members of the Peter Bent Brigham Hospital for their cordial spirit of team work.

The following description of case work is given with the idea of making clearer the kind of action taken in particular cases:

A woman of middle-age came to the Out-Door Department complaining of pressure at the back of her head and of inability to think clearly. Husband injured by fall unable to support. Wife tried to keep home, going to work in a shop, sewing. She worked beyond her strength. The insurance company failed before husband had received much of his compensation. He tried to keep up payments on home. The doctor who examined patient advised complete rest. Through Social Service, admittance to St. Luke's Convalescent Home was arranged. A visit to the home revealed that the patient's husband was confined to a wheel-chair, being paralyzed from the waist down. There were five children; the oldest married, and the two next oldest, aged 16 years and 14 years, working. Thus the income for six people was \$22 a week. The man had been a good workman and had excellent references. Temporary aid was secured. Later the man was taken to the Massachusetts General Hospital, Orthopedic Clinic, where it was decided that if a proper brace could be supplied the man would be able to get out to work. Through the Frederick E. Webber Charities Corporation, \$100, the price of the brace, was secured. patient is at home now feeling much better, and happy that her husband may soon be able to work.

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SOCIAL SERVICE

A young girl, 14 years of age, in medical ward. Diagnosis: Asthmatic bronchitis. The doctor referred her to Social Service for rest, fresh air and general building-up. The home conditions were poor; the mother a widow with two other children. She worked every day but earned very little. Through Country Week, Y. M. C. U., and the Lend-a-Hand Society arrangements were made to board patient in the country. The first place would not keep patient on account of the asthmatic attacks she had at night, so she was brought back to the hospital; a second place was tried, with same result; finally she was placed in the home of a trained nurse who was willing to give her nursing care. Patient improved there, gaining in weight and having less frequent asthmatic attacks. The Catholic Charitable Bureau consented to take charge of patient when the four weeks expired for which the Country Week and Lenda-Hand were paying.

A man, 34 years old, married, with one child, was treated at our hospital for five weeks; diagnosis, acute anterior poliomyelitis. He was then about to be discharged, and was referred to Social Service for long convalescent care. He had partial paralysis of the right arm and leg, and complete paralysis of the left leg. Social Service consulted the Infantile Paralysis Clinic at the Massachusetts General Hospital, as they undertook the convalescent care of adults under the Harvard Infantile Paralysis Commission. Their doctor pronounced the patient to be at the most critical period of his convalescence, when supervision was necessary to prevent his getting up too soon and straining his weakened back and abdominal muscles, as he surely would do if he went home. The clinic would take charge of his case provided he could be placed within reach. Arrangements were made for the patient to continue to have free care at our hospital under the direction of the Massachusetts General Hospital, Infantile Paralysis Clinic. A worker came three times a week to give him massage and exercise in bed. The patient was discharged home at the end of twelve weeks, and a month later he began to walk with crutches, with a permanent brace on his left leg. He will probably be able to resume his work as an office clerk six months after the onset of the disease, fully recovered except for his paralyzed left leg.

A young girl, 16 years old, in the medical ward. Diagnosis: Hysteria, brought on from worry over conditions at home. She and her mother were supporting the family, which consisted of five other children younger than patient. The father refused to work. The Family Welfare Society was asked to give temporary aid in order that there would be sufficient income to feed the children while patient was unable to work. Effort was made to get the father to work, but as the mother would not coöperate it was unsuccessful. Arrangements were made with the Church Home Society to place patient in the country, where she would get a wholesome family life, good food, and plenty of fresh air. She may be given an opportunity by the Church Home Society to complete her high school course, as she is a very bright girl and anxious to return to school. More stringent measures may be used on the recalcitrant father.

The young man with muscular atrophy who was referred to Social Service in May, 1917, with a poor prognosis, as the disease was thought progressive, is still working and apparently in no worse physical condition than he was three and a half years ago. A position was found for him running an elevator at the Y. M. C. A. in 1918, through the Industrial Aid Society. He is still at the Y. M. C. A., but now working in the office as a clerk, and apparently giving satisfaction.

Number of patients dealt with in Social Service	
Department during the year 1920	1,244
Old	143
New	1,101
Referred from House Medical Service	224
Referred from House Surgical Service	122
Referred from O. D. D. Medical Service	312
Referred from O. D. D. Surgical Service	101
Referred from outside agencies	342
These were referred for:	
Medical treatment	209
Diabetic Clinic	101
Heart Clinic	77
40	

SOCIAL SERVICE

After care			
Permanent care	•		96
Convalescent care			105
Rest and vacation			42
Private Hospitals and Sanatoria			18
Tuberculosis Sanatoria	•		38
Instruction in diet and general hygiene.			18
Advice and supervision			60
Friendly interest			30
District Nursing Association			10
Apparatus	•	•	9
Education of the handicapped			6
Employment or adjustment of work			49
Financial aid			50
Care of children or of family			54
Transportation			26
Information			236
Illegitimacy	•	•	10
Hospitals and Institutions			
Peter Bent Brigham Hospital			152
House and Out-Door Department			153 101
Diabetic Clinic			70
Heart Clinic			36
Psychopathic Hospital			12
Holy Ghost Hospital for Incurables			
Tuberculosis Institutions			38
The House of the Good Samaritan			9
Private Hospitals and Sanatoria			31
Chickering House			16
St. Luke's Home for Convalescents			16
Milton Convalescent Home	•		4
Children's Heart Hospital		•	1
Adams Nervine Asylum			1
Robert Brigham Hospital			1
Dalman Mamarial Haspital			
Palmer Memorial Hospital	•		1
Convalescent Home for Jewish Women. St. Monica's Home	•		1 5 1

Salvation Army Home	1
Industrial School for Crippled and Deformed	
Children	1
Organizations	
Institutions Department	5
Family Welfare Societies	
Boston	16
Committee for Homeless Men	3
Lynn ·	2
Somerville	1
Malden	4
Brockton	1
Cambridge	4
American Red Cross, Home Service	15
Federated Jewish Charities	15
District Nursing Association	16
Social Service in various hospitals	6
Industrial Aid Society	14
Jamaica Plain Friendly Society	3
Brookline Friendly Society	4
Town of Brookline Relief Fund	3
Boston Provident Association	3
Children's Aid Society	2
Children's Mission	4
Women's Educational and Industrial Union .	2
Industrial Accident Board	3
Lend-a-Hand Society	3
Young Men's Christian Union, Country Week	6
Brookline Health Centre	6
Co-operative Work Rooms	1
Tremont Temple	1
Lawrence City Mission	1
Dorchester Relief Society	2
Newton Welfare Bureau	1
Baby Hygiene Association	1
	93
age and the control of the control	60
	48
	30
Transportation provided	25

SOCIAL SERVICE

Apparatus obtained	9
*Friends and family provide	67
Patient makes own plans	63
Unable to locate	
Died	

A follow-up has been carried on of 2,146 patients; 651 letters and 301 postal-cards were sent out. 722 patients referred to the House for operation or medical treatment from Out-Door Department were personally escorted to the Admitting Office by the request of the Superintendent.

STAFF OF WORKERS

House Medical, General Department
Miss Alice M. Cheney

Heart Clinic, General Department

MISS KATHERINE A. HOMANS, Volunteer

Absent from March to September. Two months' service in France with the French Red Cross

Mrs. Ruth H. Cheley

March to January

Diabetic Clinic, House Medical
Mrs. Florence W. Mark (One-half time)

House and Out-Patient Surgical

Mrs. Lida T. Parkins

January to April. Services lent to Harvard Commission for Study of Influenza (February)

MISS MINA M. BROWN (One-half time)

July to September (Full time)

Occupational Therapy

Mrs. Eleanor W. Stone

January to July

Miss Beatrice Hardy

November to January

^{*} This often means a good deal of time and effort given by the Social Workers in helping the friends arrange for the patient's after-care.

Mrs. Elsie P. Whitney, Volunteer January to May

MISS ANNA B. WHEELWRIGHT, Volunteer
November to January

Admitting Office, Out-Patient Department
Mrs. Grace Keegan
June to September

Mrs. Ida V. Smith September to January

Clerk

Mrs. Mabel A. Lindsay

ALICE M. CHENEY

Head Worker.

Report of the Pathologist

THE figures for the Department are as follows:

Autopsies, medical service	90
Autopsies, done outside for the medical service	1
Autopsies, surgical service	41
Autopsies, done outside for the surgical service	1
Autopsies, *neurological service	26
	159
Autopsies, entered twice, *neurological and	
surgical	4
Total number of autopsies	155
Reports on surgical specimens	784
Reports on neurological specimens	95
Reports on bacteriological specimens	661
Guinea pig inoculations for suspected tubercu-	
losis	131
Total	1,826

There were 263 deaths in the hospital, 172 in the medical service, and 91 in the surgical service. The 153 autopsies done within the hospital, exclusive of the two upon patients who died after discharge, based on 263 deaths gives a percentage of 58.2 for the year.

Including the outside autopsy, a total of 91, the medical service has a percentage of 52.9.

Including the outside autopsy and the neurological autopsies restricted to the examination of the brain, a total of 68, the surgical service has a percentage of 74.7.

^{*} Since September, 1919, records separate from the general surgical pathological and autopsy records have been kept for strictly neurological cases in view of the unique value of this material at the Brigham Hospital.

The number and percentages of autopsies for preceding years were:

	Year						No.					Per cent
	1919		•	•	•		102					40.0
	1918		•	•	٠		145	•				40.0
	1917						114	•			•	55.6
	1916						113	•	•			49.54
	1915			•	٠		101				•	47.6
1913 and	1914	•				•	147	•			ě	58.5

The figures show a marked increase in number of autopsies and in the percentage for 1920 as compared with recent years; chiefly due to the new system adopted in the Medical Service, which has placed the obtaining of permissions for autopsies under the direction of the Resident Physician. This system went into effect March 15, 1920, under the direction of Doctor Sturgis. Prior to this date in 1920 only 30 per cent of deaths in the Medical Service came to autopsy. Subsequently, out of a total of 122 deaths, four of which were medicolegal, permission for autopsy was obtained in eighty instances, a percentage of 67.8 of 118 deaths. The custom adopted by Dr. Sturgis of keeping an autopsy recordbook promises to throw light upon the problems concerned with obtaining permissions for autopsies. following is quoted from a statement by Dr. Sturgis:

"As a reason for refusal of permission the majority gave 'sentimental reasons,' which we soon found was our most difficult objection to answer. It was stated that it was against the Jewish religion, although in three instances consent was obtained from Hebrews. Two refusals were by Chinese, from whom it is almost impossible to obtain consent owing to their strong traditional prejudices. On two occasions it was definitely determined that the undertakers had influenced the relatives against having an autopsy performed, and doubtless this occurred more frequently than we have discovered. Anything the

REPORT OF THE PATHOLOGIST

hospital could do to obtain better coöperation from the undertakers would undoubtedly increase the percentage of autopsies obtained."

"There were 13 deaths on the private ward. Two of these were medico-legal and hence not to be considered in the statistics (in both instances, however, permission for autopsy had been granted before it was realized that the deaths were of a medico-legal character). Of the eleven remaining deaths, autopsies were performed in seven, including one Jewish patient, and refused in four including two Jewish patients. The percentage for private patients is therefore 63.6. The number of deaths is too small to give a true comparison with the ward patients, but in general the opinion is that autopsies are more readily obtained in private ward patients."

The task of obtaining permission for autopsy is delegated to the Senior House Officer of the service, and the lowest record is 62.5 per cent of successes; the highest, 74 per cent, in the period since March 15.

The number of surgical and bacteriological examinations for preceding years, as compared with 1826 for the current year, were:

Year						No.
1919						1,628
1918					•	2,224
1917	•	•			•	1,248
1916				•		1,140
1915				•	•	1,030
1914						847

There has been a slight but steady increase in this type of service. The high figure for 1918 was due to the presence of diphtheria in the hospital necessitating many throat cultures as a part of preventative measures.

Dr. Victor C. Jacobson was appointed Resident Pathologist to serve from July 1, 1920, succeeding Dr. E. A. Greenspon.

Dr. E. R. Templeton was appointed House Officer July 1, 1920.

Dr. E. W. Goodpasture served as Pathologist from January 15 to August 15 in the absence of Dr. Wolbach.

The functions of a hospital pathological department are twofold. First in importance is the routine service in behalf of the clinical departments in the aid to diagnosis and checking of diagnosis. This type of service includes much of value in the instruction of the junior staff and furnishes the material of value for teaching of medical students. The other function is that of research, which may be carried on intensively by experimentation and by concentration of effort upon selected subjects for a definite period, or extended more diffusely in the collection of data securable by highly developed and efficient methods of routine. Until the hospital makes an effort to provide the necessary means and technical assistance for maintaining a bacteriological routine, at least on a par with the pathological routine which hospital tradition has authorized, we at the Brigham Hospital must acknowledge a serious defect in our organization, and an inferiority at least in purpose to some other similar institutions. I have pointed out in previous reports this deficiency, which affects seriously the value of both functions of the Pathological Department, but again feel it to be a duty to attract attention to this condition.

We may be said to be old-fashioned in our treatment of this Department, and indeed that charge can be referred back to the still recent organization of the hospital, when apparently tradition of early origin in pathology dominated, and this at a time when hospitals elsewhere were providing more than the autopsy room and microtome for the pathologist.

It would seem advisable to permit the same thoroughness in the Pathological Department which in the Clinical

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Department has already brought considerable renown to the hospital.

RESEARCH

Dr. Wolbach has continued studies upon Typhus Fever, and was absent on leave from January 15 to August 15 in direction of a commission to study Typhus Fever in Poland sent by the League of Red Cross Societies.

Dr. Jacobson has worked on a number of subjects in general pathology and has completed several papers besides the one published and listed below. Dr. Wolbach has contributed articles to the Oxford Text Book of Tropical Medicine, The Oxford Loose Leaf System of Medicine and Nelson Loose Leaf System of Medicine.

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S. B. WOLBACH, M.D.,

Pathologist.

DECEMBER 31, 1920.

Report of the Surgeon-in-Chief

Staff Organization. The form of departmental organization adopted in the Brigham Hospital has been described more or less fully in the preceding issues of this annual report. It hardly needs repeating, therefore, that we have a general surgical service with the same group of attendants on duty the year round; that within this general service specialization is encouraged, but the so-called surgical specialties are not segregated; that the residential system whereby a group of senior houseofficers serve for indefinite periods of time is in full force; that in the next grade a succession of junior house-officers have a sixteen-months' term, the third quarter of which is passed in charge of the out-door ambulatory clinic; that under these men in turn there serve, in successive groups of six as sub-junior externes, fourth-year medical students who act as clinical clerks and dressers in laboratory, wards, and operating room.

The introduction of this or a similar graded system into American hospitals, for which those who first organized the clinics at the Johns Hopkins are to be thanked, is coming to be more and more generally adopted in our leading hospitals, particularly in those which are utilized as teaching institutions and as a training ground for the coming generation of clinical instructors. Except for unessential details, such as the tenure of service of the junior internes, the fact that the positions are open to graduates of schools other than our own, that our ambulatory clinic (out-door department) is under the direction of the senior internes, etc., our program differs in no great respect from that which has long proved so successful at the Johns Hopkins.

"Full-Time" Service. In one respect, however, we have diverged not only from the custom pursued in the early years of the Johns Hopkins clinic, but also from the regulations more recently inaugurated there. This concerns what has come to be known as the "full-time" clinical positions. It is a subject which deserves a word of comment for historical if for no other reasons, particularly because from the outset, and for the first time in any general hospital, provision was here made whereby the chiefs-of-service could give their undivided time to the institution and to their duties in the medical school with which it was closely affiliated. A study and office being provided, they could, in short, within the hospital walls, concentrate their attention upon their departmental affairs, without the loss of time and severed allegiance which results from having more than one place of business. They were at the same time privileged to receive fees from patients who saw fit to consult them within the hospital, or who desired and could afford to pay the hospital for private accommodations.

Within the past year a corresponding arrangement for offices in the hospital, for the assistant physicians and surgeons in attendance, has been made so that at present the entire staff in one capacity or another is at work throughout the day somewhere in the institution, and all on the same basis.

In medicine, as in other professions, different kinds of men are to be found. Some are activated in one environment and under certain conditions who would lose the stimulus for work in another. Some undoubtedly do their best work as salaried fixtures in an institution. There are others who could not tolerate even such a degree of intra-mural sequestration as we have adopted, who thrive only under shifts of base, who need frequent changes of scene and of contacts. There are still others to whom a fixed salary is a deadening influence and who

are spurred by the necessity of personal effort to increase their earnings. This is all a matter of individual equation.

Three courses are open to the governing boards of our major hospitals, and it is they who must determine which of the three is most likely to operate successfully in the institution they control: (1) the old plan of many attendants who give a portion of their time periodically or through the year, though that without salary, to be sure; (2) the plan advocated by the General Education Board, that the attendants shall give their full time for which they receive a fixed and (as academic salaries go) sufficiently ample compensation; (3) the plan we have adopted as the most workable in our opinion, at least for the present generation, whereby the attendants give their full time and receive a nominal academic salary, which, however, they are at liberty to augment as their consciences permit, by charging fees to those persons who come to the institution seeking their services for which they are able to pay.

It has been found that the old plan, advantageous as it may be for the attendant to hold such a position, works in the long run to the disadvantage of the hospital and to its loss of anything but a local reputation. The second plan, with the abundant financial backing of the General Education Board, is bound to be a success, though the number of men able and willing to accept its terms will always be limited. It has already been introduced into three or four university hospitals in the country, and others will follow. The third plan, so far as I know, is in operation here at the Brigham Hospital alone. It will be of great interest to all concerned to find out which of these plans will in general come to prevail. The program most likely to make a contented staff, and which at the same time encourages productive work of such a quality as to make the widest reputation for a

REPORT OF THE SURGEON-IN-CHIEF

given hospital, is certainly the one which should be adopted where possible.

A hospital naturally must protect itself against any abuse of the privileges it offers those attending the sick for making their livelihood within its walls. It is a possible abuse, but one far more likely to be avoided if the activities of the persons concerned are confined to the institution; for if they are conducting a private clinic or office on the outside and give their hospital service free or for, a nominal salary, the institution tends in the long run to be neglected. Any temptation to place one's own affairs above one's hospital obligations is far less likely to arise on the other basis.

As I see it, the goal our leading hospitals should strive for is to adjust their rulings in these matters in the way which will lead to the greatest productivity on the part of the clinical staff. If the work is done in and for the institution rather than by and for the individual, the former receives the chief credit; and this is essentially proper, since the institution endures, whereas its successive attendants come and go. It were far better for the institution to have its own organ of publication; but even lacking that, work done within its walls should be identified primarily as institutional work, and if this is so, credit enough will overflow on to the worker himself. This, I think, was the most remarkable achievement of the early Johns Hopkins group — that one never heard the name of one of the leaders of that school or hospital without having the institution itself come to his mind, so closely affiliated were the worker and his institution,* and the association of their names and their hospital will probably never be forgotten. Yet how seldom, except perhaps in one's own community, is it possible for a lay-

^{*} There are other notable examples of this same thing — Charcot at the Salpêtrière, Bright and Addison at Guy's, Sir James Paget at St. Bartholomew's, and others might be mentioned — but they are surprisingly few.

man or even a member of the profession to connect the name of the hospital in which he got his experience and to which he owed his position with any one of the outstanding figures in our medical history?

It should be the ambition of the institution to see that this is otherwise, and there is possibly more than one way of bringing the desired end about. It is quite probable, indeed, that no one way is adaptable to all, even of our major hospitals. But however this may be, certainly the most important step in this direction is toward a full-time tenure of service on one basis or another. The mere restriction of income to a fixed salary does not necessarily make an individual more productive nor a better institutional servant: it may work the other way. At the same time, there is no question but that there are financial temptations to be resisted by those who secure positions where large returns are within easy reach. To yield to them would be exploiting one's hospital privileges. A middle ground must somewhere be found, and I have some doubts whether there can even be any uniformity in the matter in all our hospitals, so long as hospital attendants cannot all be cut from the same piece of cloth.

Needless to say, the advancement of medicine and the improvement of our hospital standards is what we all desire, and most men are willing to make some personal sacrifice to this end. How far the candidates for academic positions can be pushed in this respect without seriously affecting the source of supply is for university corporations and hospital boards to decide. It is for this reason that I have wished to draw a comparison between the program voluntarily assumed by the chiefs-of-service here and which has now extended to the entire staff, and the program supported by the General Education Board already in operation at the Johns Hopkins, at the Barnes Hospital of Washington University, at the New Haven

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Hospital affiliated with the Yale Medical School, and to be established soon in other places.

There are unquestionably some advantages and some disadvantages in both programs. Even the large funds of the General Education Board, so wisely set aside by them for medical advancement, are not inexhaustible, and it is hardly possible to put an entire hospital staff, or many of them, on a fully salaried basis. Hence, where the plan has been inaugurated, the staff has become divided into two groups,—those with a fixed salary and those making their own way; and it may sometimes happen that the latter chance to be the better teachers and more original and productive investigators. If there is to be complete harmony, it is desirable, if possible, that all should be on the same footing.

These then, to repeat, are the two full-time programs which are in operation in university hospitals. One comprises a group of attendants all on the same basis, engaged in work exclusively in their hospital, for which they receive a nominal salary but are permitted to increase this by fees from private patients. The other consists of two groups of attendants, one of them a salaried group who give their undivided time to the hospital, and a non-salaried group who are glad to give a portion of their time on the old basis as visiting clinicians, but whose living is made by extra-mural professional work. There doubtless is a good deal to be said in favor of both plans, and time will show which is best. It will depend, in the last analysis, on which of the two systems can secure the best men and keep them the most contented and productive.

Productivity. Competition in productiveness is unquestionably a sign of vigor in inter-departmental or inter-hospital relationships. If we at the Brigham Hospital are successfully to compete with institutions which receive an endowment from outside sources in support of

full-time workers, we must look alive. In the lack of funds to support research lies the chief weakness in our position. It was our hope at the outset that each member of the staff should be able to set aside some of his time for the pursuit of new knowledge and for the preparation of clinical or experimental observations. this, we have signally failed, for in an active clinic, even in one so simple in its organization as is our own, it becomes increasingly difficult for the younger men without neglect of prescribed routine duties to find time or inclination for intellectual activities when their day's work is done — if it ever is. This falls particularly hard on a surgical staff, owing to the physically wearisome and time-consuming nature of their therapeutic procedures. For productive work, two things are necessary: a fresh mind and body, and time for consecutive and uninterrupted thought.

The nearer one gets to the top, the more of these time-consuming duties there seem to be; for administer as one will, there is no escaping class-room exercises, ward visits, committee and society meetings, staff and student conferences, together with the supervision and encouragement of the work in which one's juniors are engaged. Still, probably all feel much the same way about this, even to the occupant of the lowest position on the staff, for it is to him that an accumulation of all the things that can possibly be delegated get passed on. He in his turn looks forward to the day when he may be able to delegate some of his tasks to those below him and find himself blessed thereby with sufficient freedom to engage in study or work of a higher order than routine — a time which seems never to come.

What the Brigham Hospital and what most hospitals in a like situation need above all things is provision for a greatly increased staff, so that everyone can be freed for a part of his time from all clinical responsibilities and so

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that any individual who becomes engaged in an investigation which promises some reward may absent himself for the time being from his routine duties at the bedside and operating table. As it is, with a junior staff of the same size as that with which we started out nine years ago, our ward work has about doubled.* Only an exceptional man, therefore, one capable of longer hours than others, able to shake off responsibilities and to concentrate upon mental tasks not directly related to the care of his patients, will perhaps manage to accomplish something apart from his routine duties.

A good example of how we may permit a man capable of investigative work to get caught in the net of hospital details is that of our recent Resident Surgeon, Dr. Conrad Jacobson. After three years as first Assistant Resident, Dr. Jacobson succeeded Dr. Goetsch as Resident and held the position for the next four years. Eminently fitted to fill a teaching position in surgery and eager for an academic post, his high sense of responsibility toward the ward patients was such that he had not allowed himself even the time necessary to put together the results of several research problems nearly ready for publication when he first came to us. He consequently remained for another year, on the conclusion of his long and valued service, to prepare for publication some of the papers, sufficient freedom for which should have been provided throughout his term of service.

A man's published writings are by no means the sole criterion of his eligibility for an academic position in surgery, for he may be a skillful operator, have excellent surgical judgment, be a good teacher, or have other qualifications. He is, however, more apt to be judged by his

^{*} In 1913 and 1914 together, there were 2,164 patients discharged through the surgical service. In 1920, there were 1,999 patients. Nor does this take into account the fact that the clinical diagnoses and treatment of the disorders of the individual patient, with the advance of knowledge and introduction of new instruments of precision, become increasingly complex.

writings than in any other way, and therefore, for his own good as well as for that of the institution, he should be given every inducement to get his name in medical literature, and be encouraged to produce as he goes along.

It may be an impossible ideal that every member of one's staff should have time or inclination or possess the capacity of putting together reports of his work, far less of making actual contributions to knowledge. One must admit that the tendency is to abandon the ideal and to recognize two separate groups — the routine clinical workers, and those who may be wholly freed from ward responsibilities. Heretofore the latter have usually been graduates from other hospitals who have been attracted here; and it is possible that it would be not an unwise provision for us to lengthen our service for house-officers another four months, a period which should be given up to the preparation of a thesis or to some investigation which might deserve publication. This unfortunately would be equivalent to enlarging the staff by two more men, and unhappily there is no place to house this increase in our number. The Board of Trustees is aware of this need, which in due time will be atoned for, so that we may encourage our own hospital graduates and those from elsewhere in increasing numbers to remain with us. Even as it is, not a few graduates have attached themselves to the clinic as voluntary assistants, and it is gratifying that the reputation of the hospital is such that they have even come from abroad for this purpose. Thus, Dr. Charles P. Symonds of the London Hospital and Dr. Fritz G. N. Bremer, who is here for the year on a Hoover Relief Foundation scholarship, have been at work in the clinic and laboratory during the past year in this capacity.

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Changes in Personnel. An important function of these annual departmental reports is their service as a repository of data concerning the staff and its changes, which some day may be of historical interest. An institution which takes pride in the subsequent careers of those who have once been connected with it should make some record of their activities and this in a measure is covered by the register of our present and past members which it is our custom to append. We have lost by death only one of our former house-officers, Dr. Ernest Grey, who after four years with us, the last two of them as an Assistant Resident, was offered a full-time position on the Surgical service at the Johns Hopkins Hospital. He was one of the most scholarly and productive men we have ever had, and his subsequent work in Baltimore was a great credit to the training he had received. His untimely death from pneumonia ended his all too brief career on October 12, 1916.

Our first Resident, Dr. Emil Goetsch, after three years with us, was likewise called to the Johns Hopkins on a full-time basis and became an Associate Professor of Surgery. From there he was called, in 1919, as Professor of Surgery and Surgeon-in-Chief to the Long Island College Hospital in Brooklyn, a position well deserved by the excellence and originality of his contributions to medicine. Dr. Jacobson since leaving us has been offered a promising teaching position at the University of Minnesota. He in turn was succeeded in the important position of Resident Surgeon by Dr. E. C. Cutler, one of our former house-officers who subsequently was Resident Surgeon at the Massachusetts General Hospital; he then passed a year at the Rockefeller Institute and, after two years with the army in France, returned to us.

Our Assistant-Resident Surgeons, though a younger group, have done equally well, and a number of them have come to occupy important teaching positions in other institutions. Two graduates of the University of California, Dr. Howard Fleming and Dr. C. E. Locke, have in turn served as Assistant Residents in charge of the neurological material under the Surgeon-in-Chief, and Dr. Francis Newton, one of our recent house-officers, has been advanced to an assistant residentship on the general service. During the past year, Dr. Roger C. Graves, after a year's absence as Resident Surgeon in the New Haven Hospital, returned as Dr. Quinby's Special Assistant in Urology. Dr. Percival Bailey, likewise, after a service at the Cook County Hospital in Chicago, returned to succeed Dr. George B. Wislocki as Fellow in Charge of the Surgical Laboratory in the Medical School.

Nothing could possibly be more desirable for these junior members of the staff than shifts of scene, and nothing is so likely to forestall the tendency to insularity on the part of any institution as to have a succession of capable men who have received a portion of their training elsewhere.

Being myself, through an accumulation of duties, largely shut off at present from active participation in any experimental work, the control of the Surgical Laboratory has been placed in the hands of the Arthur Tracy Cabot Fellow in Surgery, who devotes his full time to investigative work. The situation regarding the utilization of laboratories for research problems, differs on the two services in the hospital. The medical staff are fortunate in having a larger amount of time free to devote to investigative work, and this has led to the development of the medical laboratories within the hospital. On the other hand, the investigation of problems more nearly related to surgery often entail the use of animals, a form of research unsuited to a hospital laboratory. Hence, since our metabolism laboratory was temporarily turned over to the medical staff, the laboratory in the school

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has been the chief outlet for the surgical staff, and disadvantageous as this is in many ways, it is important to keep as close an affiliation with the other departmental laboratories in the Medical School as circumstances permit. Its chief drawback lies in the fact that few of the house staff can be away from hospital calls for a sufficient length of time to enable them to utilize the school laboratory with any satisfaction. Consequently we have been faced with some reluctance to recognize a group of independent laboratory workers as separate from the house staff. The Surgical Research Laboratory in the school, therefore, has a dual connection, being really under the Surgical Department of the school and is open to workers from hospitals other than our own. During the past year, moreover, it has been fused with the Laboratory of Surgical Pathology under the direction of my colleague Dr. E. H. Nichols, Clinical Professor of Surgery in the school. It is hoped that this combination may encourage a larger number of young surgeon's to develop investigative tendencies.

The successive holders of the Arthur Tracy Cabot Fellowship, with their present positions, have been as follows:

Dr. Lewis H. Weed (1912-1914), Professor of Anatomy, Johns Hopkins Medical School.

Dr. GILBERT HORRAX (1914-1915), Instructor in Surgery, Harvard Medical School.

Dr. Samuel C. Harvey (1915-1916), Assistant Professor of Surgery, Yale Medical School.

Dr. Wm. S. McCann (1916-1917), Instructor in Medicine, Bellevue Hospital Medical School.

Dr. Geo. B. Wislocki (1917-1918 and 1919-1920), Associate in Anatomy, Johns Hopkins Medical School. Dr. Percival Bailey (1920–1921).

For the higher positions, like those occupied by our residents and house-officers, there naturally is more or less competition, and they can always be filled. It is a different matter, however, when it comes to losing mem-

REPORT OF THE SURGEON-IN-CHIEF

bers of the permanent staff. We have been fortunate in retaining Dr. William C. Quinby in spite of a most tempting call, received from a sister institution, which gave him the promise of an immediate enlargement in the scope of his work; for with us, this must come much more slowly. We have been equally fortunate in holding with us Dr. Lawrence Reynolds, the hospital Roentgenologist, who had been offered a highly remunerative position in Detroit. It is highly gratifying that men of the type of Drs. Quinby and Reynolds find, with all our shortcomings at the Brigham Hospital, that they prefer to cast in their lot with us rather than to take what are possibly more remunerative positions elsewhere.

We have lost so far only two of the permanent senior members of the staff. Dr. Walter M. Boothby accepted a position as Assistant Professor of Medicine at the Mayo Clinic in November, 1916, thereby vacating the unique position he had created here which we find impossible to fill. Though officially in charge of anæsthesia, he started while with us, and for the first time so far as I am aware in any clinic, a metabolism laboratory.* Since Dr. Boothby's departure, one of his pupils, Miss Gertrude Gerrard, a graduate of our training school, and Miss Alice M. Hunt, a graduate of the Union Hospital, Fall River, Massachusetts, who likewise has had an unusual experience as an anæsthetist, have been our chief reliance in the administration of anæsthetics for the more critical operations. A year ago Miss Hunt, in collaboration with Dr. Cutler, after a careful study of our house records, made a report upon the post-operative pulmonary complications commonly attributed to inhalation narcosis. It is a matter upon which too great emphasis cannot be laid, for in many clinics insufficient attention has been paid to these supposedly unavoidable sequels of opera-

^{*} This work has been continued and further developed by Dr. Francis Peabody of the Medical Staff, aided by the Resident Physician.

tions. They are probably more frequent than is generally supposed. Whether they are to be attributed solely to the effects of the narcosis, or whether they are due in large measure to imperfect wound handling, every effort should be made to lower the percentage of these complications, and it is gratifying that perhaps as a result of these statistical studies there has been a considerable lessening in the numbers of these complications during the past year.

Another vacancy in the staff was occasioned by the departure of Dr. Clifford B. Walker, who, after several years in charge of our eye, ear, nose, and throat work, left the hospital to take up private practice in Springfield. This, too, was an irreplaceable loss, for Dr. Walker not only is a genius of rare type, a brilliant operator in his special fields, but was at the same time one of the most productive members of the staff. His work, as far as we are capable of it, devolves now upon the several members of the staff, who must needs call upon outside aid if the problems relating to these specialties get beyond them.

In my last report I discussed fully the relation which we desire to hold with our medical school colleagues in other hospitals in the matter of inter-hospital consultations. I have endeavored to make clear also what is the stand taken regarding specialization. At the present time the surgeon-in-chief, with one associate, Dr. Horrax, and one assistant resident, Dr. Locke, devote themselves chiefly to neurological problems. Dr. Quinby, an associate, Dr. Lanman, to help with his out-patient clinic, and an assistant resident, Dr. Graves, are exclusively engaged with genito-urinary conditions. Aside from these two subjects, the general staff covers the field. There is no reason at any time why an orthopedic, gynecological, ophthalmological, or indeed any other group of conditions should not become a source of special attention, if the proper man turns up - one who is likely to

advance our knowledge of a given subject by having all the available material turned over to him and thereby bring credit to the hospital. Meanwhile, the special fields must be covered as well as can be by the cloak of general surgery, of which indeed they were once a portion.*

Surgeon-pro-Tempore. My colleague, Dr. Christian, conceived the idea some years ago that it would be a great stimulus to our house-officers, a check upon the standards of work of the hospital, a bright spot in the medical school curriculum, if each year for a period of a week or two a physician and surgeon should be invited to participate in the life of the hospital and be given the complimentary title of Physician- or Surgeon-in-Chief during their sojourn. The great satisfaction which all have felt in the visits of the physicians who have acted from year to year as his remplaçant have clearly proved the success of this unusual and picturesque suggestion.

The elaborate paraphernalia essential to success in surgical therapeutics, the much more confined life which surgeons necessarily lead in their operating rooms, has heretofore appeared to be a barrier to the introduction of a similar program for the surgical staff. However, during the past year Dr. Dean Lewis, the appointee as Surgeon-in-Chief for the new hospital in connection with the University of Chicago, was with us for a period of two weeks, lived in the hospital with the internes, and took over such portions of the conduct of the clinic and student exercises as he desired. His stay was an inspiration to us all, and if he took away as a result of his visit a fraction of the inspiration he left with us—staff, house-officers, and students alike—he must have felt repaid.

^{*} In an address given before the Cleveland Academy of Medicine in December last, I endeavored to make clear my personal views regarding the relations of the surgical specialties to general surgery.

Out-door-Department. The much-needed alterations made in the out-patient building during the past year have greatly improved the quarters in which our surgical ambulatory clinic is held. Dr. Quinby's quarters have likewise been increased. We do not aspire to a large clinic, but heretofore even a normal growth was prevented by the cramped quarters. It is now possible to take a larger group of third-year students, and thus to share some of the burden of the out-patient clinical teaching with our two sister institutions, though as yet we do not do our full third. The instruction has been under the direction of Dr. Gilbert Horrax, with the exception of two mornings in the week when Dr. Hilbert Day takes the student group to the Boston Dispensary. The successive house officers who have been in control of the clinic, which is an all-day affair, have fulfilled their obligations admirably and with fewer therapeutic slips and errors than often occur when men of more senior grade are in control of such clinics.

Tabulation of Surgical Cases. On looking over our successive annual reports, it is amusing to see how, year after year, both Dr. Christian and I have protested at the futility of these long tables of clinical diagnosis. Yet we have not had the courage to omit them entirely. Tradition forbids, though it would be a great saving of time and labor on the part of our hospital secretaries, and would be an economy in other ways.

There is no gainsaying that these long, we arisome tables of disease and operation are rarely if ever consulted. They, moreover, are open to the same criticism heaped last year upon the heads of hospital administrators who are given to publishing long lists of the occupations, places of birth and of residence of the patients admitted. Could these lists be made to illuminate the probabilities of disease — occupational, seasonal, racial, sectional, etc. — from which the patients suffered, they might be of

value. Otherwise, they are as futile as tabulations of the religious beliefs, or the sex, stature, or color of hair, unless we have some object in view.

Dr. E. A. Codman's strictures on the lax standards of our hospitals in regard to their clinical output have done much to open the eyes of those concerned, in so far as to make clear that the end results should be the standard of the hospital's efficiency, not merely the number of cases which have passed through its doors and received treatment of one sort or another. But to publish annually such a report as he desires would be a task so colossal that a clerical force would have time for little else, even were they capable of passing judgment on end results. I doubt if it can be done in that way, or if it is desirable to record all results of all operations, for many of them are sufficiently standardized to make this unnecessary, and there are other ways of detecting the hospital surgeon, the quality of whose work is falling off.

We have struggled unsuccessfully with these matters, and find ourselves as the years roll round about where we were at the beginning — publishing an automatically prepared tabulation which is in many respects incomplete, imperfect and misleading. Even for purposes of comparison of the work of different hospitals, the tables are of little use so long as there is no uniformity in the various hospitals in the method of recording readmissions, transfers, the number of diagnoses per patient, what minor procedures are to be regarded as "operations," whether an operation conducted in more than one session shall be recorded as one or more, whether different procedures carried out at one session, as is so often done in gynæcological cases (incidental operations), shall be regarded as one or more operations. A hospital can make its mortality figures based on the number of operations almost what it will. All this was made a matter of special comment in my last report. At that time, a table was

prepared to which the figures for the present year may be added.

Year	Discharges	Deaths	General mortal- ity %	Diagnoses	Excess %	Patients operated	Case %	Operations re-	Post-operative deaths	Case mortality %	Operative mortality %
1913-14	2164	118	5.45	2164	0			1647	90		5.46
1915	1780	89	5.00	2366	32.3	1328	74.6	1526	72	5.4	4.7
1916	1921	93	4.84	2348	22.2	1422	74.0	1632	68	4.8	4.1
1917	1947	74	3.80	2533	30.9	1457	74.8	1639	54	3.7	3.2
1918	1785	71	3.97	2315	29.6	1304	73.1	1474	61	4.7	4.1
1919	2021	102	5.05	2659	31.07	1411	69.8	1563	79	5.6	5.05
1920	1999	91	4.6	2604	30.2	1399	69.9	1602	69	4.9	4.3

It would appear from this table that the figures, according to our existing method of computation, will not vary greatly from year to year. In about 2,000 patients (including readmissions), we are likely to make some 30 per cent excess diagnoses. About 1,400 (70 per cent) of these persons will be operated upon with something like 1,600 operations recorded, giving a 14 per cent excess of recorded operations over the number of individuals subjected to operation. There will be a case mortality of something like 5 per cent, and an operative mortality of approximately 4 per cent.*

There is no possible way of comparing these figures with those of other hospitals until some uniform standards are agreed upon, and it is a matter which I hope the College of Surgeons may some day take action upon. Competition of the proper sort is a good thing in sport or in other affairs and may stimulate to redoubled efforts,

^{*} It should be pointed out that the operative mortality on the general service is much lower than that of its neurological and genito-urinary subdivisions, which are concerned with a larger proportion of the more critical surgical maladies. The neurological fatalities average about 10 per cent each year. The genito-urinary operative mortality averages about 5 per cent. The mortality among the general surgical cases, has averaged about 3 per cent.

but unless the scores when turned in have been computed on the same basis, there can be no actual comparison made.*

> HARVEY CUSHING, Surgeon-in-Chief.

* In former years, we have given abstracts of the history of post-operative fatalities occurring in the service. The object of so doing was to make a clean breast of all of our more serious errors of judgment. As a matter of fact, so few avoidable errors are disclosed in this way that it hardly seems worth while to continue with this custom, particularly in view of the labor found necessary to compile this part of our former reports and of the present desire to lessen the expense of their publication.

Surgical Diagnoses and Operations

JANUARY I, 1920, TO JANUARY I, 1921

Inter- al No- ture	Diseases and Conditions	Diagnoses		Operations	
Nos. ofinte national N menclature	Diseases and Conditions	Total	Deaths	Total	Deaths
	SECTION I				
	SPECIFIC INFECTIOUS DISEASE, GENERAL DISEASES				
20	Abscess, deep, of hand			1	
20	Abscess, deep, of buttock	1		2	
20	Abscess, deep, of chest wall	1			
20	Incision — drainage	1		2	
34	Incision — drainage	1		1	
25	Curettage	1		1	
38	Incision — drainage			1	
143	Carbuncle of arm	1			-
143	Carbuncle of back	2			
	Excision	ł .	1 1	$\begin{vmatrix} 2\\2 \end{vmatrix}$	
143	Skin graft				
	Incision — drainage			1	
143	Carbuncle of lip			_	
	Incision — drainage			5	
143	Carbuncle of neck	7	1		
	Excision	1		2	
143	Incision — drainage			5	1
140	Carbuncles, multiple	1		2	2
143	Carbuncle of scalp			_	
	Excision			1	1

Inter- al No- ture	D	DIAG	NOSES	OPER	ATIONS
Nos. of International No-	Diseases and Conditions	Total	Deaths	Total	Deaths
144	Cellulitis: varia			1	
86 18 143	Coryza	2 2 3		2	
38 37 37	Gonococcus infection	2 1 1		1	
19	Infection, acute	1			
7 20	Scarlatina	5		1 1	1 1
37 1 145	Syphilis	1			
	SECTION II				
	DISEASES DUE TO ANIMAL PARASITES				
107 145	Ascariasis (Ascaris lumbricoides)	1			
	SECTION III				
	DISEASES OF METABOLISM				
55 55 55 50 50	Acidosis, non-diabetic	2 2 14 8			
50	Amputation of leg			2	

Inter- ol No- ture	Diseases and Conditions		Diagnoses		Operations	
Nos. of International Nomenclature	DISEASES AND CONDITIONS	Total	Deaths	Total	Deaths	
	•					
	SECTION IV					
	DISEASES PECULIAR TO INFANCY					
	No cases				·	
	SECTION V					
	DISEASES DUE TO PHYSICAL AGENTS					
167	Burns, 1st and 2nd degrees			1		
167	Burns, 1st, 2nd and 3rd degrees	1		2		
	SECTION VI					
	POISONINGS, INTOXICATIONS					
56 57	Alcohol poisoning	1				
	Lead	3				
59	Appendicectomy		• • • • •	1		
	SECTION VII					
	TUMORS (NOT OF SPECIAL ORGANS)					
45	Adenocarcinoma of axilla			1		
45	Carcinoma of antrum			1		
45	Carcinoma, epidermoid of hand	1				
45 45	Carcinoma of glands of neck					
10	Excision of gland			1		
46	Cyst, branchial, of neck	2		2		
46	Excision	1	,	2		
	Excision	• • • • • • •		1		

Inter- al No- tture	Diseases and Conditions	DIAG	NOSES	OPER	ATIONS
Nos. of Inter- national No- menclature	Diseases and Conditions	Total	Deaths	Total	Deaths
46	Enchondroma of parotid			1	
46	Keloid of arm	1		1	
46	Excision — skin graft	1		1	
46	Lipoma of thoracic wall	1			
١	Excision			1	
53	Lymphoma, malignant	1			
	Laparotomy, exploratory	1		1	
45 46	Malignant growth, mixed, of parotid gland				
40	Papilloma of buttock	1		1	
99	Tumor of parotid, mixed, non-malignant				
	Excision			2	
	SECTION VIII				
	CONGENITAL MALFORMATIONS				
150	Accessory urethra	1			
	Excision	1		1	
150	Anomaly of epididymis,			1	
150	Excision	1		1	
150	Anomaly of spine				
150	Cervical rib				
150	Congenital band, transduodenal	1			
150	Dilatation of colon and sigmoid,	I .			
150	Double ureter				
150	Horseshoe kidney			1	
150	Hydrocephalus	Į.	• • • • •	1	
150	Hypertrophy of phalanges,)	
	Plastic operation on toes			1	
150	Microtia with deformity				
	Plastic			1	
150	Pilonidal sinus	I .		4	
150	Excision			7	
150	Spina bifida	3			
	Excision			2	
150	Talipes	1			

Inter- of No- ture		DIAG	NOSES	OPER	ATIONS
Nos.of Inter- national No- menclature	Diseases and Conditions	Total	Deaths	Total	Deaths
150	Torticollis			1	
150	Undescended testicle			1 8	
	SECTION IX		:		
	GENERAL INJURIES AND DISEASES OF THE SKIN AND SUBCUTANEOUS TISSUE				
175	Abrasions, multiple	1			
144	Abscess, axillary	1			
	Drainage		• • • • •	1.	
144	Abscess of elbow				
144	Abscess of shin			1	
144	Abscess of thigh			1	
	Incision — drainage			1	
186	Contusions, various		1		
	Incision — drainage of hematoma			1	
142	Gangrene, carbolic				
186	Hematoma				
4.45	Excision of right breast		• • • • • [[1	
145	Ingrowing toe-nail				
144	Excision			2	
177	Incision — drainage			3	1
144	Septic thumb				1
-	Incision — drainage			1	
144	Sepsis, localized to elbow	1			
	Incision — drainage			1	
145	Sinus, umbilical				
2.4	Excision		• • • • •	1	
34	Tuberculosis of skin	1			
115	Tumors of skin				
145	Lipoma			1	
145	Excision			1	
110	Excision	- 1		2	
	Skin graft			1	
	70	- 1			

Inter- al No- ture		DIAG	NOSES	Operations	
Nos.ofIn national menclatu	Diseases and Conditions	Total	Deaths	Total	Deaths
14 5 186	Ulcer of toe	8		1	
145	SECTION X SPECIAL SKIN DISEASES Paronychia		-	1	•
	SECTION XI DISEASES OF THE CIRCULATORY SYSTEM				
81	A. Arteries Aneurysm, popliteal	1			
81	Endo-aneurysmorrhaphy ,	8	• • • • • • • •	1	
81 142	laparotomy	1		1	
81	Amputation of leg	2			
82	Amputation of toe			1	
82 82	Amputation of thigh	1 2	2	1	1
31	Laparotomy — ileostomy	1			1
85 82	B. HEART Auricular fibrillation Embolism of heart	4 1			

onal No-		Diagnoses		OPERATIONS	
Nos. of International No menclature	Diseases and Conditions	Total	Deaths	Total	Deaths
79 85 79 79 79	Endocarditis Hypertension Myocardial insufficiency Myocarditis, chronic Valvular disease, chronic cardiac: mitral stenosis	1 4	,		
	C. VEINS				
83 83 83 83 83	Phlebitis Thrombophlebitis Thrombosis of veins Ulcer, varicose Varicose veins Excision Varicose veins with ulcers Excision Excision Excision Excision Excision	2 2 1 27		22 2 1	
	SECTION XII DISEASES OF THE LYMPHATIC SYSTEM				
84	Abscess of axillary lymph nodes	1			
84 84 34	Incision — drainage	3 4			
Ji	Tuberculosis of cervical lymph nodes Excision			13 4	•
	SECTION XIII				
	DISEASES OF THE BLOOD				
55	Hemophilia	2		1	

Inter- al No- ature	D	DIAG	NOSES	Operations	
Nos. of Inter- national No- menclature	Diseases and Conditions	Total	Deaths	Total	Deaths
	SECTION XIV				
	DISEASES OF THE DUCTLESS GLANDS				
	B. Pituitary Gland				
55	Acromegaly with tumor			2	,
55	Acromegaly without tumor	2			
52A	Dyspituitarism with tumor, adenoma			9	
	Transphenoidal operation			11	
	Subtemporal decompression			1	·
52A	Dyspituitarism with suprasellar tumor, endo-				
	thelioma	3	2		
	Osteoplastic exploration				1
	Subtemporal decompression			I .	1
	Transphenoid exposure				
524	Transfrontal exposure		• • • • •	1	
52A 52A	Dyspituitarism with suprasellar tumor, osteoma	1 3			
JZA	Dyspituitarism with suprasellar tumor, cyst			2	
	Transfrontal exposure			1	
52A	Dyspituitarism without tumor				
		r			
	C. Spleen				
116	Abscess of spleen	1			
	Incision — drainage			1	
54	Banti's disease	1			
	Splenectomy	• • • • • •		1	
	F. THYROID GLAND				·-
51	Goitre, exophthalmic (to include hyperthyroid-				
	ism)	1	2		
	Ligation of superior thyroid arteries	1		7.	
	Ligation of artery — partial thyroidectomy				
	(2 stages)			6	1
0.0	Thyroidectomy, partial		• • • • •	10	1
88	Myxedema	1		1	

Nos.of Inter- national No- menclature	Diseases and Conditions	Diag	NOSES	Operations	
Nos.of nation mencia	DISEASES AND CONDITIONS	Total	Deaths	Total	Deaths
88	Tumors of the thyroid Adenoma			1	
45	Carcinoma	ŧ.			
88	Cyst				
	Enucleation			1	
88	Cystadenoma				
	Excision			1	
88	Goitre, adenomatous				
	Thyroidectomy, partial			1	
88	Goitre, cystic	1			
	Thyroidectomy, partial			1	
45	Lymphosarcoma				
1	Tracheotomy — excision of tumor (2				
	stages)		• • • • •	2	
	H. Polyglandular Syndrome				
55		1			
33	Polyglandular syndrome	1			
	SECTION XV				
	DISEASES OF THE NERVOUS SYSTEM				
	A. Brain				
60	Abscess, cerebellar	1	1		
60	Abscess, cerebral				
81	Aneurysm, intracranial		1		
	Subtemporal decompression			1	1
81	Arteriosclerosis, cerebral	1			
74	Cephalocele		1		
	Excision			2	1
72	Chorea	1			
186	Concussion, cerebral				
186	Contusions, cerebral	2			
60	Encephalitis				
60	Encephalitis, cerebral	1			
69	Epilepsy	18	1		
	Repair of cranial defect			1	
. .	Cranial exploration			1	1
74	Epilepsy, Jacksonian	3			
	Craniotomy			1	
					-

al No-	Dromon- C-	DIAG	NOSES	Operations	
Nos. of International No	Diseases and Conditions	Total	Deaths	Total	Deaths
66 64 74 82	Hemiplegia	1 2 2			,
74	Cerebral tumors Angioma.,			1	
45	Osteoplastic exploration	12	4	7	1 2
74	Extirpation, partial				1
• •	Exploration			4	2
74	Glioma of optic chiasm	1	1		1.
74	Gliomatous cyst	4	1	5	1
45	Neuroblastoma	1			•
74	Papilloma	1			
30	Tuberculoma	2	2	1 1	1 1
74	Uncertified	42	4		
45	Endothelioma			4	
74 74	Glioma		2	6	
74	Glioma, cystic			1	

al No-	Diseases and Conditions	DIAG	NOSES	OPERA	ATIONS
Nos. of Inter- national No- menclature	DISEASES AND CONDITIONS	Total	Deaths	Total	Deaths
74	Gliomatous cyst			3	
45	Neuroblastoma	2			
30	Tuberculoma	1			
	Exploration			1	
74	Uncertified	21			
	Exploration			15	
	Subtemporal decompression			1	
	Extracerebellar tumors				
74	Acoustic neuroma	16	1		
	Enucleation, subcapsular			8	
	Exploration			2	1
	Subtemporal decompression			2	
45	Adenocarcinoma, papillary	1			
	Exploration			1	
74	Cholesteatoma		1		
	Exploration			1	1
45	Endothelioma	1			
74	Glioma	2			
	Extirpation, partial			1	
74	Uncertified	1			
	Brain tumor suspects				
74	Cerebral	17	1		
	Exploration			3	1
	Subtemporal decompression			2	
74	Cerebellar	4			
			•		
	B. CEREBROSPINAL AFFECTIONS				
63	Rhinorrhoea, cerebrospinal	1	1		
63	Sclerosis, multiple	4			
37	Syphilis of central nervous system	12			
	C. MENINGES				
61	Arachnoid cyst	2	İ		
	Excision			1	
61	Arachnoiditis				
	Craniotomy '			1	
	Laminectomy			1	
61	Meningitis				
, —	·		1	J	

Inter- al No- ature	Diseases and Conditions	DIAG	NOSES	OPER	ATIONS
Nos. of International Nomenclature	DISEASES AND CONDITIONS		Deaths	Total	Deaths
37 30 74 61	Meningitis, syphilitic Meningitis, tuberculous Exploration Meningismus Pachymeningitis, hemorrhagic	2 2		1	
	D. Mental Affections				
154 154 154 68 74 74 73 74 68 74 68	Dementia, senile Presbyophrenia Psychosis, senile, alcoholic Dementia, unclassified Feeblemindedness Neurosis, traumatic Psychoneurosis Hysteria Neurasthenia Psychasthenia Psychasthenia War neurosis Psychopathic personality Psychoses, unclassified	1 1 2 2 3 2 4 5 5 1 - 3			
74	E. MISCELLANEOUS Athetosis	1		2	
74 70 186 74 74 63	Neurectomy (2 stages)	4 2 1 1 1			
	F. Peripheral Nerves				
73	Neuralgia	21		1.5	

Inter- al No- tture	Diagnoses				ATIONS
Nos. of International No- menciature	Diseases and Conditions	Total	Deaths	Total	Deaths
66	Trigeminal, major	1		23	
186	Paralysis Puncture of median nerve Lysis of nerve Tumor of peripheral nerve	1		1	
74	Neurofibromatosis (Recklinghausen's disease) Excision		• • • • •	1	
	G. Spinal Cord				
63 145 74 63 63 63 63 62 34 45 63	Hematomyelia Herpes Zoster Paralysis, pressure Paraplegia, spinal Poliomyelitis Sclerosis, spinal Syringomyelia Tabes dorsalis Tuberculosis of spine Tumors of spinal cord Endothelioma Laminectomy Pseudo tumor Laminectomy Wound, gunshot, of spine Laminectomy — removal of foreign body	1 1 1 1 4 1 1 3	•••••	2 1 1	·
	H. Sympathetic Nervous System	:			
74 142 145	Edema, angioneurotic				
	J. Myopathies				
149 149	Dystonia musculorum deformans	1	• • • • •	2	

Inter- al No- ature	Diagnoses Diseases and Conditions		noses	Operations	
Nos. of International Nomenclature	DISEASES AND CONDITIONS	Total	Deaths	Total	Deaths
	SECTION XVI DISEASES OF BONES, JOINTS, MUSCLES, TENDONS, AND FASCIA				
	A. Diseases of Bones and Cartilages				
146	Exostosis.			4	
146	Excision	1			
185	Osteoplastic repair	• • • • •		1	
100	Acetabulum	1			
149	' Reduction	1		3	
	Reduction, open			1	
	External semi-lumar cartilage			1	
	Femur	8			
	Reduction			1	•
	Humerus	7	1		
	Reduction				
	Reduction, open			1	
	Malleolus				
	Metacarpal bones				
	Debridement			1	
	Metacarpal bones, compound				
	Debridement			1	
	Olecranon	2			
	Open reduction — suture	1		1	
	Os calcis				
	Impaction			1	
	Patella	1		2	
	Reduction, open	1	• • • • •	2	
	Phalanges, distal				
	Pott's				
	Radius and olecranon	1			
	0.5	1	I.	[]	1-

Inter- al No- ture	Digrages and Contrarons		NOSES	OPERATIONS	
Nos.of Inter- national No- menclature	Diseases and Conditions	Total	Total Deaths		Deaths
,	Radius and ulna	1 3			
	Scapula and ribs Skull Cranioplasty Elevation of depressed fracture Exploration Subtemporal decompression Skull, compound, comminuted Elevation of fragments	1 23 1	1	2	1 1
	Supra-orbital plate Tibia Impaction Reduction Tibia and fibula Incision of fascia Bone plate — removal of bone plate Pin traction Reduction Tibia and fibula, compound Reduction — bone plate — plaster cast —	14		1 1 2	·
146	bone plate and resection	2 7		1	
146	Osteomyelitis, chronic	8		1 2 4 1	
146	Resection	2		1	

Inter- al No- ture		Diagnoses Opera		ATIONS	
Nos. ofInter- national No- menclature	Diseases and Conditions	Total	Deaths	Total	Deaths
186	Incision — drainage	••••		1	
	Femur	ł		1	
	Internal condyle of humerus	2			
48	Reduction	1		3	
34	Tuberculosis of astragulus	1		1	
34	Tuberculosis of sacro-iliac synchondrosis	1		1	
34	Tumors of bone			,	
45	Carcinoma of tibia, metastatic	1		· 1	
45	Drainage			-1	
20	Amputation of thigh			1	
182	Wound, gunshot of skull	1	1		
	B. Diseases of the Joints				
147	Ankylosis	1			
147	Arthritis, unclassified	1			
147	Arthritis, acute	1			
	Exploration of septic elbow — removal of	į.			
	sequestrum			11	
147	Partial resection of elbow			1	
111	Tonsillectomy	ſ		$\parallel _2$	
48	Arthritis, chronic infectious				
38	Arthritis, chronic infectious, gonorrheal	1			
48	Arthritis, chronic infectious, hypertrophic .				
147	Arthritis, hypertrophic				
48	Arthritis, infectious			\parallel 2	
186	Incision — drainage				
100	Resection of head of radius and coronoia				
	process	1		1	
172	Contusion of elbow joint				
172	Dislocation of elbow				
186	Dislocation of semilunar bone	1			
175	Reduction	1		1	
	07		1	11	1 .

Diseases and Conditions	Inter- al No- tture	Diseases and Conditions	DIAG	NOSES	Operations	
Reduction	Nos. of Inter- national No- menclature	DISEASES AND CONDITIONS	Total	Deaths	Total	Deaths
147		Reduction			1	
Osteoarthritis, traumatic	147	Osteoarthritis, chronic	1			
172						
Relaxed sacro-iliac joint	172	Sprain of knee	1			
Tuberculosis of hip joint	1					
C. Other Diseases of the Locomotor System 174	1	Tuberculosis of hip joint	1			
System 174 Amputation, traumatic, of hand 1 149 Bursitis, subdeltoid 2 2 149 Bursitis, acute 5		Incision — drainage	• • • • •		1	
Bursitis, subdeltoid 2 2 3 49 Bursitis, acute 5 4 149 Excision of palmar fascia 1 1 1 1 1 1 1 1 1						
Bursitis, acute						
Incision — drainage 2 1 149 Contraction, Dupuytren's 1 2 1 175 Crush of legs 1 1 175 Suture of lacerations — skin graft — pedicle and skin graft — skin graft 2 172 Rupture of quadriceps tendon 1 187 1		Bursitis, subdeltoid	2 5			
149 Contraction, Dupuytren's 1 Excision of palmar fascia 1 175 Crush of legs 1 Suture of lacerations — skin graft — pedicle and skin graft — skin graft 4 149 Pes planus 3 149 Pronated feet 2 172 Rupture of quadriceps tendon 1 149 Strain of ligaments 1 149 Strain of muscle 149 Strain, sacro-iliac SECTION XVII DISEASES AND INJURIES OF THE EYE		Incision — drainage			2	
Excision of palmar fascia 1 Crush of legs 1 Suture of lacerations — skin graft — pedicle and skin graft — skin graft 4 149 Pes planus 3 149 Pronated feet 2 172 Rupture of quadriceps tendon 1 149 Strain of ligaments 1 149 Strain of muscle 1 Strain, sacro-iliac 1 SECTION XVII 1 DISEASES AND INJURIES OF THE EYE	140				1	•
175 Crush of legs	149	Excision of palmar fascia	1		1	
pedicle and skin graft — skin graft 149 Pes planus 3 149 Pronated feet 2 172 Rupture of quadriceps tendon 1 149 Strain of ligaments 1 149 Strain of muscle 1 149 Strain of muscle 1 149 Strain, sacro-iliac 1 SECTION XVII DISEASES AND INJURIES OF THE EYE	175	Crush of legs	1			
149Pes planus3149Pronated feet2172Rupture of quadriceps tendon1149Strain of ligaments1149Strain of ligaments and muscles, spinal1149Strain of muscle1149Strain, sacro-iliac1SECTION XVII1DISEASES AND INJURIES OF THE EYE		- 1			4	
Rupture of quadriceps tendon		Pes planus	3			
149Strain of ligaments1149Strain of ligaments and muscles, spinal1149Strain of muscle1149Strain, sacro-iliac1SECTION XVII1DISEASES AND INJURIES OF THE EYE		Pronated feet	2			
149 Strain of ligaments and muscles, spinal	1					
SECTION XVII DISEASES AND INJURIES OF THE EYE		Strain of ligaments and muscles, spinal	1			
SECTION XVII DISEASES AND INJURIES OF THE EYE						
DISEASES AND INJURIES OF THE EYE		sorum, suoro mue	•			
		SECTION XVII				,
Diseases of the Eye		Diseases of the Eye				
C. Lacrimal Apparatus		C. Lacrimal Apparatus				
5 Dacryocystitis, chronic	5	Dacryocystitis, chronic	1			

al No-	Dramana Carra	Diagnoses		OPERA	ATIONS
Nos. of Inte	Diseases and Conditions	Total	Deaths	Total	Deaths
75	Inflammation of lacrimal gland, acute			1	
	E. Cornea			i	
75 75	Keratitis				
	J. UVEAL TRACT				
75	Uveitis	1			
	K. Retina				
75	Hemianopsia, homonymous	1			
	M. Optic Nerve				
75 75	Atrophy, primary optic	1		1	
75	N. EYEBALL	1			
13	Exophthalmos	1			
	Diseases of the Ear				
76	V. MIDDLE EAR AND MASTOID Mastoiditis	2			
	Simple mastoid			1	
76	Excision — drainage			1	
7 6	Otitis, media	1			
76	Otitis media, acute	1			
76	Otitis media, chronic				
76	Otitis media, non-suppurative				
76	Otitis media, suppurative	2			
76	Tumor of middle ear Cholesteatoma	1			
	W. Internal Ear				
76	Labyrinthitis	1			1
	80		1		

Inter- al No- tture		DIAG	NOSES	OPERA	ATIONS
Nos. of Inter- national No- menclature	Diseases and Conditions	Total	Deaths	Total	Deaths
	SECTION XVIII DISEASES OF THE NOSE AND ACCES- SORY SINUSES				
146	Sinusitis, acute			1	
146	Sinusitis, chronic	4		1	
34	Sinusitis, tuberculous	1			
82	Thrombosis of longitudinal sinus	1			,
86	Osteoma of frontal sinus			1	
86	Removal	1	•••••	1	
	SECTION XIX DISEASES OF THE MOUTH, LIPS, CHEEKS, PHARYNX, TONSILS, AND PALATE	1	•		
100	Abscess, peritonsillar				
99	Incision — drainage	7	1	6	1
99	Stomatitis, ulcerative	1			
100 100	Tonsillitis, acute				
	Tonsillectomy			43	
34	Tonsillitis, chronic, tuberculous			1	
100	Tonsillitis, chronic and hypertrophied adenoids Tonsillectomy and adenoidectomy	4		4	
45	Tumors Carcinoma of cheek	1		1	

No- re		DIAG	NOSES	OPER	ATIONS
Nos. of International Nomenclature	Diseases and Conditions				1
Nos nati mer		Total	Deaths	Total	Deaths
45	Carcinoma of lip				
	Resection of lip — dissection of neck Resection of lip — plastic	i	1		
45	Carcinoma of tonsil			1	
45	Epithelioma of lip	3			•
	Excision tumor — dissection of neck	• • • • •		2	
٠	SECTION XX				
	DISEASES OF THE JAW, TEETH, AND GUMS				
99	Abscess, alveolar			1	
99	Caries of teeth	2			
99	Extraction of teeth	2		1	
	Extraction			2	
146	Tumors	1			
146	Epulis of maxilla			1	
39	Carcinoma of jaw	2			
	Resection of jaw		• • • • • •	2	
	SECTION XXI				
	Diseases of the Tongue				
	Tumor of tongue				
39	Carcinoma			1	
	Resection of tongue — partial excision				
	(2 stages)			2	
	SECTION XXII				
	DISEASES OF THE ESOPHAGUS				
103	Cardiospasm				
101	Dilatation of esophagus	1			
101	Diverticulum of esophagus				
40	Carcinoma	1			

DICEACES AND CONDUCTORS		DIAGNOSES		ATIO NS
DISEASES AND CONDITIONS	Total	Deaths	Total	Deaths
Gastroenterostomy, posterior Diverticulum of stomach Gastroptosis Hour glass contraction of stomach Indigestion, gastric, acute Pylorospasm Stenosis, pyloric (One case included under dilatation of stomach) Tumors of stomach Carcinoma Gastrectomy, partial Gastrectomy, partial, — gastrojejunostomy Gastroenterostomy Laparotomy, exploratory Ulcer, gastric Cauterization Cauterization— gastrojejunostomy Excision— gastroenterostomy Gastrojejunostomy 1 1 2 2 1	3	1 3 1 2 4 1 2 2 1 2	Deaths 1 2	
terior	2		1 1	
	DISEASES OF THE STOMACH Dilatation of stomach, chronic Gastroenterostomy, posterior Diverticulum of stomach Gastroptosis Hour glass contraction of stomach Indigestion, gastric, acute Pylorospasm Stenosis, pyloric (One case included under dilatation of stomach) Tumors of stomach Carcinoma Gastrectomy, partial Gastrectomy, partial, — gastrojejunostomy Gastroenterostomy Laparotomy, exploratory Ulcer, gastric Cauterization Cauterization — gastrojejunostomy Excision — gastroenterostomy Gastrojejunostomy Gastrojejunostomy Gastrotomy — gastroenterostomy Pylorectomy — gastrojejunostomy, posterior Pyloroplasty, Finney Resection, partial Resection, sleeve SECTION XXIV DISEASES OF THE INTESTINES Adhesions, intestinal Laparotomy, exploratory Appendicitis	SECTION XXIII DISEASES OF THE STOMACH Dilatation of stomach, chronic 1 Gastroenterostomy, posterior 1 Diverticulum of stomach 1 Gastroptosis 1 Hour glass contraction of stomach 2 Indigestion, gastric, acute 2 Pylorospasm 1 Stenosis, pyloric (One case included under dilatation of stomach) 1 Tumors of stomach 14 Gastrectomy, partial Gastrectomy, partial Gastrectomy, partial Gastrectomy, exploratory 15 Ulcer, gastric 15 Cauterization gastrojejunostomy Gastrojejunost	SECTION XXIII DISEASES OF THE STOMACH Dilatation of stomach, chronic 1 Gastroenterostomy, posterior 1 Diverticulum of stomach 1 Gastroptosis 1 Hour glass contraction of stomach 2 Indigestion, gastric, acute 2 Pylorospasm 1 Stenosis, pyloric (One case included under dilatation of stomach) 1 Tumors of stomach 14 3 Gastrectomy, partial Gastrectomy, partial, — gastrojejunostomy Gastroenterostomy Laparotomy, exploratory 15 1 Cauterization Cauterization Cauterization — gastroenterostomy Gastrojejunostomy Gastr	DISEASES AND CONDITIONS Total Deaths

Inter- al No- tture		DIAGNOSES		OPERATIONS	
Nos. of International No metional No menclature	Diseases and Conditions		Deaths	Total	Deaths
10 8	Appendicitis, acute			40	
108	Appendicitis, acute with abscess	7		6	
108	Appendicitis, acute, with abscess and general				
	peritonitis			1	
108	Appendicitis, acute, with perforation	5		5	
108	Appendicitis, acute, with peritonitis	1			
108	Appendicectomy		• • • • •	1	
	Appendicectomy		1	38	
108	Appendicitis, chronic, with abscess	2		2	
108	Appendicectomy	10			
105	Appendicectomy			9	
105	Laparotomy, exploratory — cecostomy Colitis, mucous	• • • • •		2	
110	Constipation	20			
	Laparotomy, exploratory (appendicectomy, incidental 3)			5	
105	Appendicectomy				
105	Diarrhoea, chronic	1			
110	Diverticulitis, with perforation	• • • • •		1	
110	Diverticulitis of sigmoid	3			,
110	Enteroptosis	2			
•	Laparotomy, exploratory (appendicectomy, incidental 2)		••••	2	-
110	Fistula, fecal			1	
105 109	Indigestion, intestinal, acute	1			
109	Division of band — jejunostomy		• • • • •		
	Enterostomy				
	0.0				

Inter- al No- ature	Digrages and Compressed	DIAG	NOSES	Operations	
Nos. of International Nomental	Diseases and Conditions	Total	Deaths	Total	Deaths
	Laparotomy — colostomy			1 1	1
109	Obstruction, chronic intestinal	1			
109	Obstruction, subacute, intestinal	1			
31	Tuberculosis of appendix	1			
	Appendicectomy			1	
31	Tuberculosis of cecum				
	Tumors of intestines	_			
41	Adenocarcinoma	1			
	Cecostomy — resection of sigmoid —				1
	closure wound			2	
41	Carcinoma	į.		~	
	Colocolostomy			1	
	Laparotomy, exploratory		- 11	3	
	Resection			3	
	Sigmoidostomy		7 1	1	
105	Ulcer, duodenal			_	
	Gastroenterostomy			4	
	Plication pylorus — gastroenterostomy	1	- 11	7	
	Pyloroplasty, Finney (appendicectomy,				
	incidental I)			4	
105	Ulcer, duodenal, perforated			-	
100	Closure ruptured ulcer — gastrojejunos-		-		
	tomy, posterior (appendicectomy, in-				
	cidental 1)			1	
105	Ulcer, jejunum (at site of gastroenterostomy)				
100	Excision ulcer—closure gastroenteros-	1			
	tomy — partial resection jejunum			1	
110	Visceroptosis (splanchnoptosis)			1	
		11	1		
	Laparotomy, exploratory (appendicectomy, incidental 1)	ļ		2	
		* * * * * *		4	
	SECTION XXV		•		
	DISEASES OF THE LIVER AND GALL DUCTS				
115	Adhesions about gall bladder	1		1	

Inter- al No-	D	DIAG	NOSES	Operations	
Nos. of Inter- national No- menclature	Diseases and Conditions	Total	Deaths	Total	Deaths
115 115	Division of adhesions (appendicectomy, incidental 1)	1		1	
	Cholecystectomy (appendicectomy, incidental 1)			1	
114	Cholecystitis, acute and cholelithiasis Cholecystectomy (appendicectomy, incidental I)			6 3	1
114	Cholecystitis, chronic and cholelithiasis Cholecystectomy (appendicectomy, incidental 3)				1
	Cholecystectomy—choledochostomy—secondary suture of wound			2	
115 114	Cholecystitis, subacute	4		7	
115	Cholecystectomy — choledochostomy	1	1		1
115	Cholecystitis, cholelithiasis and stone in common duct		1	•	
115	choledochostomy			1	1
	Cholecystectomy (appendicectomy, incidental 2)			2 1	
115	Cholelithiasis with stone in common duct	1 .			
113	Cirrhosis of the liver	1			

Inter- al No- tture	D	DIAG	NOSES	OPERA	ATIONS
Nos. of International No menclature	Diseases and Conditions	Total	Deaths	Total	Deaths
113	Hepatitis, chronic			1	
115 115	Jaundice, hemolytic	1	1	1	1
	SECTION XXVI				
	DISEASES OF THE PANCREAS				
118 118	Pancreatitis, chronic				
45	Carcinoma			1	
	otomy	• • • • • • •	• • • • • •	1	
	SECTION XXVII				
ļ	DISEASES OF THE ABDOMEN AND PERITONEUM IN GENERAL				
144	Abscess of abdominal wall			1	
144	Abscess, retrocecal			2	
117	Adhesions, peritoneal	1	6		
117	Hemoperitoneum			4	
109	Laparotomy, exploratory	• • • • •	• • • • •	1	
	Epigastric	1			
	Femoral				
	Repair			3	
	Femoral, strangulated			1	
	Incision — drainage		11	3	
	Inguinal		1		
	Repair (appendicectomy, incidental 1) .			147	1
	Repair — incision — drainage of scrotal hematoma			1	
			- 4	1	

finter- ial No- ature	Diamaga and Compressor	Diagnoses		Oper.	ATIONS
Nos. ofinter national No menclature	Diseases and Conditions	Total	Deaths Tota		Deaths
	Inguinal, strangulated	• • • • •		2	
	Umbilical	• • • • •			
	Ventral			6	
117 117	Resection intestine and repair	1		1	
117	Peritonitis, acute, general Peritonitis, acute, pelvic Suprapubic drainage Peritonitis generalses	1	1	1	
117 31	Peritonitis, gonorrheal	2 4		2	
	Laparotomy, exploratory				
45	Carcinoma, abdominal			1	
45 45	Carcinoma, retroperitoneal	1 		2	
170	Sarcoma, melanotic of abdominal wall Excision with dissection of lymph nodes . Wound, gunshot of abdomen			1	
	SECTION XXVIII				
	DISEASES OF THE RECTUM AND ANUS				
110	Abscess, ischio-rectal		•	11 .	46
110	Hemorrhoidectomy	2			
110	abscess	3		1	

Inter- al No- ture	D	DIAG	NOSES	Operations	
Nos. of International No- menclature	Diseases and Conditions	Total	Deaths	Total	Deaths
110	Fissure of anus			2	
110	Fistula in anus	13		9	
83	Hemorrhoids, external	10		6	
83	Hemorrhoids, external and internal	16		12 1	
83	Whitehead operation	17		15	
172 110	Laceration of sphincter ani Repair Prolapse of rectum	1			
110	Plastic				y
110	Dilatation of sphincter	1			
41	Tumors Carcinoma	5	3	1 2	1
110	Radical extirpation — colostomy — secondary exploration	1	• • • • •	3	1
	SECTION XXIX DISEASES OF THE LARYNX			1	
186 28	Injury to larynx				

Inter- al No- ture		DIAG	NOSES	Operations	
Nos. of International Nomenclature	Diseases and Conditions	Total Deaths		Total	Deaths
90 89 90 90 89	SECTION XXX DISEASES OF THE TRACHEA AND BRONCHI Bronchiectasis	4 1 1			
	SECTION XXXI			1	
	DISEASES OF THE LUNGS				
98 81 98 92 91 92 28	Abscess of lung Drainage Rib resection Thoracostomy Embolism, pulmonary Hemoptysis Pneumonia Pneumonia, broncho Pneumonia, lobar Tuberculosis, pulmonary	2 1 2 20 1			1
	Tumors Malignant disease of lung	1	1		
93	SECTION XXXII DISEASES OF THE PLEURA AND MEDIASTINUM Empyema			12 7	1
	SECTION XXXIII DISEASES OF THE KIDNEY AND URETER				-
122	Abscess, perinephric			2	

Inter- ri No- ture		Diagnoses		OPERATIONS	
Nos. of International No- menclature	Diseases and Conditions	Total	Total Deaths		Deaths
117 123	Adhesions, perirenal	8		2	
120	Cardio-renal insufficiency	1			
122	Dilatation of ureters	3			
150	Ectopic kidney	1			
122	Fistula, renal	5			
122	Hematuria		1		
122	Hydronephrosis ,			3	
122	Nephrectomy		• • • • •	3	
122	Infarct of kidney			1	
122	Nephrectomy	2	• • • • • •	1	
122	Nephralgia	Z		1	
	Nephropexy, decapsulation of kidney				
120	Nephritis, chronic			•	
123	Nephrolithiasis				
120	Nephrectomy	20		2	
	Pyelotomy				
122	Nephroptosis				
	Nephropexy			2	
122	Oxaluria				
122	Pyelitis		1		
	Appendicectomy		_	1	:
	Nephrostomy, bilateral		1 1	1	1
122	Pyelonephritis				
	Nephrectomy			10	
	Nephrostomy				·
	Ligation of anomalous renal artery				
122	Pyonephrosis				
	Nephrectomy			2	•
122	Stricture of ureter				
34	Tuberculosis of kidney				
	Nephrectomy			1	
	Exploration of ureter			1	
	Tumors of kidney				
45	Hypernephroma	5	2		
	Excision of tumor \ldots				1
	Nephrectomy			2	
				!	

Inter- al No- ture		DIAG	DIAGNOSES OP		ATIONS
Nos. of Intenational Nomenclature	Diseases and Conditions	Total	Deaths	Total	Deaths
122	Exploration kidney — ligation renal artery and vein	2		2	1
120	Nephrectomy			2	
	. SECTION XXXIV				
	DISEASES OF THE BLADDER				
124	Adhesions, perivesical			1	
123	Calculus, vesical	• • • • •	1 1	1	
124	Cystitis	27		1	
124 124 124	Cystitis, acute	3 5 1			
124	Diverticulum of bladder	1		2	
125	scarred area			1	
125	Excision			2	
	Repair			1	
125	cectomy, incidental I)	$\begin{vmatrix} \dots & \ddots & \ddots \\ 2 & & 2 \end{vmatrix}$	• • • • •	1	
125	Fistula, vesico-intestinal		4	1 1	
124	Incontinence of urine			1	
124	Suprapubic cystostomy	1			

Inter- al No- ature	D	Diag	NOSES	OPE RATIONS	
Nos. of Inter- national No- menclature	Diseases and Conditions	Total	Total Deaths	Total	Deaths
124 124 124 62 124 34	Pericystitis. Purpura vesicae. Relaxed vesical sphincter. Plastic on urethra Tabetic bladder. Trigonitis Fulguration. Tuberculosis of bladder Cystotomy, suprapubic Tumors of bladder Carcinoma Cystotomy, suprapubic Cystectomy, partial. Cystectomy, partial — transplantation of ureter Exploration of anterior vesical space Laparotomy. Papilloma Excision Cauterization Ulcer of bladder Cystotomy, suprapubic Cystotomy, suprapubic Cystotomy, suprapubic — excision	1 1 2 2 2 7 8	1	1 1 1 2 1 1 1 5 1	1
125 125 125 125 125	SECTION XXXV DISEASES OF THE URETHRA, MALE AND FEMALE Abscess, periurethral Drainage	2 1 1 19	1	8 8	1

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nter- No- 1re		DIAG	DIAGNOSES		ATIONS
Nos. of International Nomenclature	Diseases and Conditions				1
Nos mat mer		Total	Deaths	Total	Deaths
	Tumor				
125	Cyst				
125	Excision			1	
38	Urethritis, gonorrheal				
	SECTION XXXVI				
	DISEASES OF THE MALE GENERA- TIVE ORGANS				
	B. Penis				
127	Fibrosis of corpora cavernosa	1			
	Plastic on penis	• • • • •		1	
	C. Prostate				
126	Abscess of prostate	2			
	Incision — drainage	Y .			
126	Perineal section			1	<u> </u>
120	Cystotomy, suprapubic			10	2
	(Seven operations for median bar)			_	
	Prostatectomy, perineal				1
	Prostatectomy, suprapubic (2 stages)			14	1
126	Prostatitis		·		_
126	Prostatitis, chronic		۲		
38	Prostatitis, gonorrheal	1			
	Tumors of prostate				
45	Carcinoma				
	Prostatectomy, perineal			ľ	
	Prostatectomy, suprapubic (1 stage)			1	
	Prostatectomy, suprapubic (2 stages)		• • • • •	2	•
	D. Scrotum			*	
127	Abscess of scrotum				
107	Incision — drainage		• • • • •	1	
127	Hydrocele			1	
	Epididymo-orchidectomy				
	Inversion of sac				
	100			*	

Inter- al No- ture	Dramana con Commence	DIAGNOSES		es Operation	
Nos. of Inter- national No- menclature	Diseases and Conditions	Total	Deaths	Total	Deaths
83	Varicocele			11	
	E. Seminal Vesicles		*		
127	Vesiculitis	1			
	F. Testicle				
127	Epididymitis	• • • • •		1 1	
127	Epididymitis, acute	1		4	
127	abscess		•••••	1	
38	Epididymectomy			1	
38	Orchidectomy	1		1	
	SECTION XXXVII				109
	DISEASES OF THE FEMALE GEN- ERATIVE ORGANS				
	A. General and Functional				
130	Abscess, pelvic			11	
130	Dysmenorrhoea	1			
132	Laceration of pelvic floor		,		
130	Menopause	1			
128	Menorrhagia			11	
	Hysterectomy, supravaginal — salpingo- oöphorectomy			1	
	Hysterotomy (appendicectomy, incidental 1)	1		1	

REPORT OF THE SURGEON-IN-CHIEF

al No-	Dromage Comme		NOSES	Operations		
Nos. of International Nomenclature	Diseases and Conditions	Total	Deaths	Total	Deaths	
	Panhysterectomy — salpingo-oöphorec- tomy			1		
130	uterus) Menstruation, normal			2		
130 130	Menstruation, incipient	1				
132	Relaxed pelvic floor	• • • • •		1		
	(appendicectomy, incidental 1)			1		
	Colporrhaphy, anterior and posterior Colporrhaphy, anterior and posterior —			3		
	' fixation of uterus				h	
	colporrhaphy, anterior and posterior— hysterectomy			1		
•	Colporrhaphy, anterior and posterior— trachelorrhaphy—posterior fixation of	•				
	Colporrhaphy, posterior, ventral fixation.			1		
	B. FALLOPIAN TUBES					
132	Pyosalpinx			1		
132	Vaginal puncture	6		1 1 1		

DISEASES AND CONDITIONS Diagnoses Operation	aths
Laparotomy, drainage (appendicectomy, incidental 1)	
Abdomino-pelvic drainage — ventral suspension (appendicectomy, incidental 1) Hysterectomy — salpingectomy	
Hysterectomy — salpingectomy	
Hysterectomy — salpingo-oöphorectomy — repair of ventral hernia	
Hysterectomy — salpingo-oöphorectomy — repair of ventral hernia	
repair of ventral hernia	
Laparotomy, exploratory (appendicectomy, incidental I) Salpingectomy, (appendicectomy, incidental 2) Salpingo-oöphorectomy (appendicectomy, incidental 5) Salpingo-oöphorectomy — implantation of ovarian tissue Salpingo-oöphorectomy — ventral suspension (appendicectomy, incidental 2) Salpingo-oöphorectomy — ventral fixation (appendicectomy, incidental I) Salpingitis, chronic, gonorrheal Salpingo-oöphorectomy	
tomy, incidental 1)	
Salpingectomy, (appendicectomy, incidental 2)	
Salpingectomy, (appendicectomy, incidental 2)	
dental 2) 5 Salpingo-oöphorectomy (appendicectomy, incidental 5) 15 Salpingo-oöphorectomy — implantation of ovarian tissue 1 Salpingo-oöphorectomy — ventral suspension (appendicectomy, incidental 2) 2 Salpingo-oöphorectomy — ventral fixation (appendicectomy, incidental 1) 1 38 Salpingitis, chronic, gonorrheal 3 Salpingo-oöphorectomy 2 132 Salpingitis and oöphoritis, chronic 1 Hysterectomy, supravaginal — salpingo-	
Salpingo-oöphorectomy (appendicectomy, incidental 5)	
incidental 5)	
Salpingo-oöphorectomy — implantation of ovarian tissue	1
ovarian tissue 1 Salpingo-oöphorectomy — ventral suspension (appendicectomy, incidental 2) 2 Salpingo-oöphorectomy — ventral fixation (appendicectomy, incidental 1) 1 38 Salpingitis, chronic, gonorrheal 3 Salpingo-oöphorectomy 2 132 Salpingitis and oöphoritis, chronic 1 Hysterectomy, supravaginal — salpingo-	
Salpingo-oöphorectomy — ventral suspension (appendicectomy, incidental 2)	
sion (appendicectomy, incidental 2)	
Salpingo-oöphorectomy — ventral fixation (appendicectomy, incidental I)	
38 Salpingitis, chronic, gonorrheal 3 Salpingo-oöphorectomy 2 132 Salpingitis and oöphoritis, chronic 1 Hysterectomy supravaginal — salpingo-	
38 Salpingitis, chronic, gonorrheal	
Salpingo-oöphorectomy	
132 Salpingitis and oöphoritis, chronic	
Hysterectomy, supravaginal — salpingo-	
and home addresses the delay at the out of a suggest that	
oöphorectomy — dilatation of cervix for drainage	
Salpingo-oöphorectomy (appendicectomy,	
incidental I)	
34 Tuberculosis of fallopian tube	
Salpingo-oöphorectomy	1
34 Tuberculosis of fallopian tube and ovary 1	
Salpingo-oöphorectomy — drainage of ab-	
scess *	
C. Ovary	
132 Abscess of ovary	
Salpingo-oöphorectomy (appendicectomy,	
incidental 1)	
106	

REPORT OF THE SURGEON-IN-CHIEF

Inter- al No- ture	D	Diagnoses		DIAGNOSES OPI		OPERATIONS	
Nos. of Inter- national No- menclature	Diseases and Conditions	Total	Deaths	Total	Deaths		
132 132	Dyscrazio, ovarian	1					
132	cidental 1)	• • • • • •	• • • • •	1			
102	Oöphorectomy	• • • • •	• • • • • •	2			
132	Oöphoritis, unqualified		,				
42	Carcinoma			1			
131	Cyst of broad ligament	1					
131	Cyst, ovarian	13					
	Drainage of pelvic abscess		1		1		
	Excision — repair of diastasis recti			1			
	Oöphorectomy		1				
	Salpingectomy (appendicectomy, incidental 1)						
	Salpingo-oöphorectomy (appendicectomy, incidental 2)						
	Vaginal puncture			I .			
131	- Cyst, dermoid of ovary			1			
131	Cystadenoma	2					
	Excision			1			
	hysterectomy			1			
	D. Uterus						
130	Anteflexion of uterus			1			
130	Endocervicitis	7					
120	Dilatation and curettage			5			
130	Endocervicitis, chronic			1			
38	Endocervicitis, gonorrheal	1					
130	Endometritis			3			

Inter- al No- tture	Decrease and Consumous	DIAG	Diagnoses		ATIONS
Nos. of International Nomenclature	Diseases and Conditions	Total	Deaths	Total	Deaths
	Hysterectomy, superavaginal — oöphorec-			1	
120	tomy			•	
130	Endometritis, acute	t .		1	
420	Dilatation and curettage	į.			
130	Endometritis, chronic	l .			
	Laparotomy, exploratory — dilatation and			2	
420	curettage (appendicectomy, incidental 1)				
130	Endometritis, hyperplastic	i		5	
	Dilatation and curettage	l .	1 1		
	Hysterectomy			_	
120				1	
130	Laceration of cervix uteri			1	
	Amputation of cervix			i .	
	Trachelorrhaphy (appendicectomy, inci-			1	
	dental 1)	1		7	
120					
128	Metrorrhagia			2	
120					
130	Procidentia				
	Colporrhaphy, anterior and posterior—			2	
•	ventral fixation	ł	• • • • •		
	ventral suspension			1	
	Colporrhaphy, anterior and posterior—			•	
	ventral fixation fundus — posterior fixa-				
	tion cervix			1	
	Colporrhaphy, anterior and posterior—				
	hysterectomy — salpingo-oöphorectomy	ì			
	(appendicectomy, incidental 1)			1	}
130	Prolapse of uterus				
	Hysterectomy, salpingo-oöphorectomy	i .		1	
	Ventral suspension	Į.	1 1	1	
	Ventral fixation of fundus — posterior				
	fixation cervix		 	1	
130	Retroversion of uterus				
	Dilatation and curettage			2	
	Ventral fixation (appendicectomy, inci-				
	dental I)	i e		1	
	Ventral suspension (appendicectomy, in-				
	cidental 12)			25	
	100	1			

REPORT OF THE SURGEON-IN-CHIEF

Inter- al No- ture		Diagnoses Diagnoses		OPERATIONS		
Nos. of Inter- national No- menclature	Diseases and Conditions	Total	Deaths	Total	Deaths	
42	Tumors of uterus Adenocarcinoma			1		
42	Carcinoma of cervix	14		1		
42	Carcinoma				1	
129 129	Cysts of cervix	1 10				
	Dilatation and curettage			3		
129	dicectomy, incidental 1)			3		
1 47	Hysterectomy (appendicectomy, incidental I)			1		
42 129	Leiomyosarcoma	1 28	2			
	Dilatation and curettage			1 2		
	Hysterectomy — salpingo-oöphorectomy (appendicectomy, incidental 4) Myomectomy (appendicectomy, incidental 1)			17	2	
	(Appendicectomy, incidental I)			1		

Inter al No ture	,	Diagnoses		s Operation	
Nos. of International Nomenclature	Diseases and Conditions	Total	Deaths	Total	Deaths
129	Polyp			1	
	dental 1)		,	,	
	E. Vagina				
124	Cystocele	1		1	
124	Cystocele and rectocele	3			
	Colporrhaphy, anterior and posterior		1	2	
38	Vaginitis, gonorrheal	1			
Î					
	F. Vulva				
132	Abscess of Bartholin's gland	4			·
	Incision — drainage			2	
j	Excision			1	
132	Abscess of vulva	1			
	Excision			1	
132	Kraurosis vulvae	1			
42	Carcinoma	2			
	Excision			1	
	Excision — sigmoidostomy — skin graft				
	— closure of sigmoidostomy			4	
	4				
	,				
	SECTION XXXVIII	· ·			: .
	Puerperal State				
134	Abortion	4			
134	Abortion, threatened				1
138	Eclampsia	1			
127	Metritis, acute, puerperal	1			
	Suprapubic drainage			1	
134	Miscarriage		1	,	
424	Dilatation and curettage			20	1
134	Pregnancy				
	Laparotomy, exploratory			1	

REPORT OF THE SURGEON-IN-CHIEF

nter- No-		DIAG	NOSES	OPERA	ATIONS
Nos. of International Nomenclature	Diseases and Conditions	Total	Deaths	Total	Deaths
134	Pregnancy, extra-uterine			1 3	
136 138	Subinvolution of uterus				
	SECTION XXXIX DISEASES OF THE BREAST, MALE AND FEMALE				
133	(Non-puerperal in the Female) Abscess of breast	1	•	4	
150	Accessory mammary gland of axilla	1		1	77 .a.
133 133	Hypertrophy of breast, female	1 1		1	
133	Incision — drainage	2	1	3	
133	Mastitis, acute		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	2	975
133	Mastitis, chronic, cystic			2	
133	Adenofibroma			2	
133	Adenoma			1	
40	Amputation breast			1 12	
133	Cyst	1 1		1	
	SECTION XL				
	Anaphylaxis No cases				
	111				

Inter- al No- ture	D Cove-move	Diagnoses		OPERATION	
Nos. of Inter- national No- menclature	Diseases and Conditions	Total	Deaths	Total	Deaths
	SECTION XLI				
	ILL DEFINED, OR UNCLASSIFIED DISEASES				
189 189	Debility	1			
189	Foreign body in wound of operation	i			
83	Hemorrhage, postoperative	_		1	
189	No diagnosis			•	
	Ether examination		{	1 1	
	Laparotomy, exploratory, (appendicec-			7	
189	tomy, incidental 4)		• • • • •		
117	Polyserositis				
189	Wound of operation				
	Excision			1	
	Plastic on leg			1	
	Resuture wound			1	
189	Wound of operation, infected				
	Excision wound — secondary closure		1	1	
	Incision — drainage	• • • • •		1	
	Total	2,604	91	1,602	69

REPORT OF THE SURGEON-IN-CHIEF

Summary of Statistics

JANUARY 1, 1920 TO JANUARY 1, 1921		
Total number of surgical admissions in 1920	2,023 90	
		2,113
Total number of surgical cases discharged, including 35 cases		
transferred to Medical Service	1,908	
Total number of deaths	91	
	1,999	
Total number of surgical cases remaining in the wards Jan. 1, 1921	114	
		2,113
Total number of operations		1,602
Incidental operations		73
Total		1,675

Report of the Physician-in-Chief

During much of 1920 the Physician-in-Chief was on leave-of-absence from the hospital, for nine months of the year serving at Washington as Chairman of the Division of Medical Sciences of the National Research Council, and for a short time toward the end of the year serving on the request of the Ohio State Board of Health as chief consultant in an extensive epidemic of typhoid fever at Salem, Ohio. Such public duties would seem to be obligations that should be met by members when their absence from the hospital is feasible.

The year 1920 has been largely a year of readjustment of hospital work to a pre-war basis of efficiency. A considerable amount has been accomplished in that direction; however, progress has not been satisfactory. needs to be realized that, with an increased cost for practically everything, an unaugmented endowment can meet the situation only by curtailments. Curtailments in an efficiently organized institution can but mean decrease in the efficiency of the work. Let us frankly admit this fact. Actually we have had more work to do and in many respects less to do it with during 1920, and so it has not been so well done. If we are not to regress we must have more funds; if we are to progress our needs must be admittedly large; I feel sure that for any institution a failure to progress inevitably leads to regression and we cannot afford not to grow after the accomplishments of our first few years of existence. The staff has curtailed its activities cheerfully during the emergency of acutely decreased resources; if the staff is willing complacently to continue to do so over any long period of time, the Trustees should begin to think that they need a new staff.

REPORT OF THE PHYSICIAN-IN-CHIEF

The report of Dr. Frothingham, Acting Physician-in-Chief during my absence, follows:

Report of the Acting Physician-in-Chief

For the first nine months in the year 1920 the Physician-in-Chief, Dr. Henry A. Christian, was on leave-of-absence and the medical service was conducted by the Acting Physician-in-Chief, Dr. Channing Frothingham. No attempt was made to introduce any new plans of organization during this period and the service was run in the manner developed during the preceding years.

In April of this year, Dr. Howard F. West resigned as Resident Physician, which position he had held since October, 1917, in order to take up the practice of medicine in California. In his place was appointed Dr. Cyrus C. Sturgis, who had been an Assistant Resident Physician since returning from war service in August, 1919, and previously was a medical house-officer. Dr. Joseph T. Wearn has continued as Assistant Resident Physician and the other positions as Assistant Resident Physician have been occupied by new men during the year.

The service for medical house-officers who entered during 1920 will be for sixteen months, as was the custom before the war. In addition to securing as house-officers some of the highest standing men in the Harvard Medical School the service has been fortunate in securing men of high standing from other medical schools. In this way ideas from the outside are brought to the hospital which are of value in stimulating all those at work.

Due to the stimulating activity of Dr. Sturgis and the conscientious efforts of the house-officers in obtaining permission from the relatives of the deceased, there has been a marked increase in the number of post-mortem examinations held on cases from the medical wards during the last eight months of the year. The advantage

to the doctors and patients from this increase in the opportunities to learn about disease has been marked. It seems as though some plan should be devised by which every case which is unfortunate enough to die in the hospital should be autopsied. The public in most instances are already enough enlightened to realize the value of such a procedure and the objections to it are very infrequent among the more educated classes. In accordance with the tendency of the times to have some check upon a man's work, the public, through the use of autopsies, should be demanding this opportunity to have some check upon the physician's work rather than that the physician should have to beg for the opportunity to find out if he has been correct in his work.

During the early part of the year there was a sufficient number of cases of influenza admitted to the hospital to make it necessary to designate certain wards for these cases, but the number admitted was not sufficient to cause a serious strain upon the medical and nursing staff to care for them.

With the advances in diagnosis and treatment the routine procedures that should be done for the majority of patients on the medical service have become so numerous that it is impossible for the house-officers and resident physicians to complete all of this work. In addition to its being unfortunate to the patients that the various tests cannot be done this excess of routine procedure is especially unfortunate for the medical officers in that it deprives them of the opportunity to put in a certain amount of time on research work. The performance of these routine procedures can, in some instances, be carried out by technicians, but on account of the lack of sufficient funds the medical service has not been able to have as many technicians as it desires. It is hoped that in the future it will be possible for the Trustees to supply the medical service with a larger number of trained tech-

REPORT OF THE ACTING PHYSICIAN-IN-CHIEF

nicians. As a result, some of the routine work of the hospital is now carried on by associate physicians. This is especially unfortunate as it diminishes the attractiveness of the work which these physicians do here and also interferes with the time that they might devote towards research work. It is from this group of young physicians that the hospital may expect its greatest amount of research work which is so important for the life of the institution. At the present time the associate physicians are doing their work here at the hospital impelled by no other motive than their interest and enthusiasm for the work. Opportunities should be created so that the positions of associate physicians at the hospital are made more attractive. This is especially important as the young men who do this work are usually just beginning to have some return upon the big financial investment made to carry them through the early part of their medical education and it is only fair that they should receive some financial return for the work that they are doing so that they may feel more free to devote a larger amount of time to this very important work of investigation.

STATISTICS OF MEDICAL SERVICE.

In order to economize some of the statistical tables printed in previous years are omitted.

Table A which follows is essentially a table of causes of death grouped according to the International Classification of Causes of Death. The chief diagnosis in each case represents the patient, and a given patient appears under but one diagnosis. Table B is a summary to show the number of cases admitted, treated, etc., on the medical service.

Table A

Report of Medical Diseases in Terms of International Classification

JANUARY 1, 1920, TO JANUARY 1, 1921

Nos. of International Nomenclature	Diseases and Conditions	Total No. of discharges	Discharges of patients admitted more than once	Actual No. of patients completing their stay in the hospital	No. of deaths
	GENERAL DISEASES				
1	Typhoid fever	8		8	2
4	Malaria	5		5	• •
9	Diphtheria and croup	1		1	
10	Influenza (? — 1)*	130	5	125	9
14	Dysentery	1	• •	1	• •
18	Erysipelas	2		2	• • •
19	Other epidemic diseases		• •	1	• •
20	Purulent infection and septicemia	10	• •	10	6
26	Pellagra	2	• •	2	1
28	Tuberculosis of the lungs $(? - 6) *$	34	1	33	6
29	Acute miliary tuberculosis	3	• •	3	2
30	Tuberculous meningitis	2 5	• •	2	2
31	Abdominal tuberculosis	5	• •	5	• •
33	White swellings $(? - 1) *$	1	• •	1	• •
34	Tuberculosis of other organs (? — 1) *	725	F00	4	1
37 38	Syphilis $(?-23)*$	725	588	137	2
38 40	Cancer and other malignant tumors of the	0		8	• •
40	stomach, liver (? — 1) *	28	• • • •	28	5

^{*} The question marks mean that diagnoses in these cases were made with reservation, there being enough factors in the case of uncertainty to throw some doubt on the correctness of the diagnosis and yet the diagnosis given expresses as well as we can the patient's condition. To obtain the number of patients in whom diagnosis was made without reservation subtract the number following the question mark from the total.

REPORT OF THE ACTING PHYSICIAN-IN-CHIEF

Nos. of International Nomenclature	DISEASES AND CONDITIONS	Total No. of discharges	Discharges of patients admitted more than once	Actual No. of patients completing their stay in the hospital	No. of deaths
41 42	Cancer and other malignant tumors of the peritoneum, intestines, rectum (? — 3)*. Cancer and other malignant tumors of the female genital organs	8		8	2
45	Cancer and other malignant tumors of other organs or of organs not specified (? — 4)*.	19		18	2
46 47 48 50 52 53 54 55 56 59	Other tumors (tumors of the female genital organs excepted) Acute articular rheumatism Chronic rheumatism and gout Diabetes Addison's disease (? — 1) * Leukemia (? — 1) * Anemia, chlorosis (? — 6) * Other general diseases Alcoholism (acute or chronic) Other chronic poisonings (? — 1) *	2 9 5 59 3 8 46 5 4 3	5 1 12 1	1 9 5 54 - 3 7 34 4 4 3	2 2 4 1
60 61 62 63 64 66 67 68 69 72 73 74 75 76	DISEASES OF THE NERVOUS SYSTEM AND OF THE ORGANS OF SPECIAL SENSE Encephalitis (?—3)* Simple menigitis Locomotor ataxia Other diseases of the spinal cord (?—4)* Cerebral hemorrhage, apoplexy (?—1)* Paralysis without specified cause General paralysis of the insane Other forms of mental alienation (?—2)* Epilepsy Chorea Neuralgia and neuritis Other diseases of the nervous system (?—15)* Diseases of the eyes and their annexa Diseases of the ears (?—1)*	12 6 145 30 14 11 4 9 10 11 29	114 1 1 2 1 2 1 2		2 5 1 7 3

Nos. of International Nomenclature	Diseases and Conditions	Total No. of discharges	Discharges of patients admitted more than once	Actual No. of patients completing their stay in the hospital	No. of deaths
	DISEASES OF THE CIRCULATORY SYSTEM				
77	Pericarditis	2		2	
7 8	Acute endocarditis	5		5	3
79	Organic diseases of the heart $(?-1)*$	145	34	111	38
80	Angina pectoris $(?-1)*$	7	1	6	
81	Diseases of the arteries, atheroma, aneurysm,				
	etc	35	3	32	9
82	Embolism and thrombosis	9	1	8	3
83	Diseases of the veins (varices, hemorrhoids,				
0.5	phlebitis, etc.)	2	• •	2	• •
85	Hemorrhage; other diseases of the circulatory	43	8	35	
	system	43	0	33	• •
	DISEASES OF THE RESPIRATORY SYSTEM				
86	Diseases of the nasal fossæ	3	• •	3	
87	Diseases of the larynx			2	• •
88	Diseases of the thyroid body	19	1	18	1
89	Acute bronchitis	12	1	11	1
90	Chronic bronchitis	48	5	43	1
91	Bronchopneumonia	19		19	11
92	Pneumonia	48		47	13
93	Pleurisy	18		18	• •
96	Asthma	36	5	31	1
98	Other diseases of the respiratory system			1	
	(tuberculosis excepted) (? — 1) *	4	• •	4	• •
	DISEASES OF THE DIGESTIVE SYSTEM	-			
99	Diseases of the mouth and annexa $(?-1)*$.	6		6	
100	Diseases of the pharynx	46	1	45	
102	Ulcers of the stomach (? — 4) *	15	1	14	
103	Other diseases of the stomach (cancer excepted)			31	
105	Diarrhoea and enteritis $(?-2)*$	30	• •	30	1

REPORT OF THE ACTING PHYSICIAN-IN-CHIEF

lal		ses.	nts	ints /	
Nos. of International Nomenclature	Diseases and Conditions	Total No. of discharges	Discharges of patients admitted more than once	Actual No. of patients completing their stay in the hospital	No. of deaths
107 108 109 110 113 114 115 116 117	Intestinal parasites Appendicitis and typhlitis (? — 2)* Hernia, intestinal obstruction (? — 1)* Other diseases of the intestines (? — 1)* Cirrhosis of the liver Biliary calculi (? — 9)* Other diseases of the liver (? — 1)* Diseases of the spleen Simple peritonitis (nonpuerperal)	6 6 24 29 19 15 3	1 1 25 1	4 6 5 23 4 19 14 3 2	3 1
119	NON-VENEREAL DISEASES OF THE GEN- ITO-URINARY SYSTEM AND ANNEXA Acute nephritis			7	• •
120 122	Bright's disease (? — 1) *	63	10		14
123 124 125 126	(? - 1) *	9 8 1 1	• •	13 9 8 1 1	1
127 130 131 132	Non-venereal diseases of the male genital organs (? — 1) *	1 7 1	•••	1 7 1	••
	THE PUERPERAL STATE	_			
134 137 138	Accidents of pregnancy	1		3 1 1	••
	DISEASES OF THE SKIN AND CELLULAR TISSUE				
143 144 145	Furuncle	5		2 5 12	•••

Nos. of International Nomenclature	Diseases and Conditions	Total No. of discharges	Discharges of patients admitted more than once	Actual No. of patients completing their stay in the hospital	No. of deaths
	DISEASES OF THE BONES AND OF THE ORGANS OF LOCOMOTION				
146 147	Diseases of the bones (tuberculosis excepted) . Diseases of the bones (tuberculosis and	10	1	9	• •
	rheumatism excepted) (? — 2) *	43	2	41	• •
149	Other diseases of the organs of locomotion (? — 2) *	6	• •	6	; •
	. MALFORMATIONS				yk.
150(2)	Congenital malformations of the heart	1		1	• •
	EARLY INFANCY				6.5
151	Congenital debility, icterus, and sclerema	1		1	• •
	OLD AGE · · -				<u>^</u>
154	Senility	2	• •	2	
	EXTERNAL CAUSES				*
164 165	Poisoning by food	2 6	• •	$\begin{bmatrix} 2 \\ 6 \end{bmatrix}$	1
186	Other external violence	2	• •	2	7 • •
	ILL-DEFINED DISEASES				1 1
189	Not specified or ill defined	38	1	37	••
	Total all cases discharged in 1919	2474	849	1625	. 172
		2560			

Table B Summary of Medical Report

JANUARY 1, 1920, TO JANUARY 1, 1921

Total number of admissions in 1920		2481	
Total number of medical cases remaining in the wards January 1, 1920		79	
			2560
			2560
Total number of medical re-admissions discharged in 1920	1		,
Total number of medical new cases discharged in 1920	1625		
		2474	
Total number of medical cases remaining in the wards		86	
¹ January 1, 1921			
			2560
Results on medical cases discharged in 1920 were as follows:			
Total number discharged well	160		
improved unimproved	1584 94		
untreated	311		
transferred to Surgical Service	153		
dead	172		
		0474	
Total number of medical cases remaining in the wards		2474	
January 1, 1921		86	
			2560

Out-Door Department.

Throughout the year the work in the Out-Door Department so far as possible has been grouped into classes 123

so that special attention to the treatment of various diseases could be given. There have been in all eight classes for the following diseases: asthma, syphilis, renal, gastro-intestinal, tuberculosis, neurological, diabetic, and cardiac. The routine work of the Out-Patient Department in the early part of the year was done by the medical house-officers under the supervision of various members of the staff. It has been found that these occasional visits of the various members of the staff to the Out-Door Department has not been entirely satisfactory and therefore during the last few months of the year the Out-Patient Department was put under the supervision of one of the associate physicians. The idea is to put in charge of the Out-Patient Department for a period of several months one of the associate physicians so that the work there may be a little more thoroughly supervised. Dr. George P. Denny has had charge of this work since October, Here again to have an efficient and maintained regular service salaries will be needed; it is not reasonable to ask of our staff members to give to the hospital much of their time without remuneration. We cannot expect to have a satisfactory service for out-patients until the hospital makes provision for salaried positions for these men.

ASTHMA AND HAY-FEVER CLASS

The following statistics summarize the work for 1920:

Total hay-fever patients treated	180
Total new asthma patients treated	516
Total number of treatments given to both hay-	
fever and asthma patients	6128

CARDIAC CLASS

During the past year the Cardiac Class has had 77 members of whom 56 have been regular attendants. These patients have made 387 visitors a weekly average of seven to eight. Although the total membership was

smaller than in the preceding years, there have been a larger proportion of regular attendants and a greater number of visits than ever before. Thirty-nine patients were carried over from last year and there have been 38 new cases referred to the clinic.

Of the new cases seven were referred from the hospital wards, seven from outside sources and the rest from the general out-patient clinic. Nine patients were sent from the clinic to the hospital wards. There have been four deaths either in the hospital or at home.

As in previous years the aim of the Class has been to treat only cases of valvular disease. A good many children who have had rheumatism or chorea and who show no definite evidence of valvular trouble are seen in the clinic. These are watched for the appearance of signs of cardiac trouble, and their lives regulated accordingly.

Knowledge of home and school life and of employment conditions are essential in the guiding of a patient with a damaged heart. These details are gone into very thoroughly by the Social Service Worker, who meets and interviews the patients in the Class and makes visits in the homes and the schools. Knowing these factors it is often possible to make many suggestions which will lessen the effort of the day's work. Changes in employment, in school routine and in household duties are often of vital importance. The question of employment for patients of this type is an ever present source of trouble, but on the whole there has been success in keeping cardiac cases self supporting.

Digitalis and rest are the main weapons in combating breaks in compensation. The cleaning up of foci of infection, i. e., teeth and tonsils, usually has been accomplished before the case comes to the Class. Several cardiac functional tests are used but it has been found that these are not as valuable as a careful history and physical examination.

DIABETIC CLASS

The Diabetic Class has been continued during 1920, under the direction of a doctor and an assistant, meeting on Thursday afternoons. The patients in this Class are referred from the wards and from the general out-patient department clinics. They are given individual consultations and are requested to return frequently at first, and later on, once a month, or once in three months.

As the Diabetic Class has now been in operation for five years, perhaps a few generalizations about regulating diets are justifiable. Dr. Joslin says in the preface to his Diabetic Manual, "For one diabetic patient who knows too much about his disease there are unquestionably ninety-nine who know too little." Surely all who work in diabetic clinics agree with him. The question to be decided is what form the education is to take, and the chief guide is the extent of the patient's previous education. A patient who is prepared to understand it gets much help from such a book as Dr. Joslin's manual, and needs only occasional supervision and advice. However, such a book put into the hands of an uneducated person has the unfortunate effect of bewildering his mind with a strange vocabulary of terms that he thinks he understands so that though he becomes expert in the use of these words, he really has no conception of the main idea in the regulation of his diet.

We have made some progress in our constant endeavor to work out some scheme whereby a definite measure of the food taken could be made without resorting to weighing, a scheme which at the same time is of an accuracy satisfactory to the doctor and is expressed in terms which are comprehensible to the patient.

It is our firm belief that without supervision at home to an extent which is impracticable it is a waste of time to work out orders for a diet in weighed portions, because of the unforeseen variables which vitiate the accuracy of the result.

In most cases the safest plan is to talk simple, untechnical language: The patient is to eat no bread, cereals, sweets, or potatoes, to limit meat to a moderate portion once a day, to eat freely (or sparingly) of butter, cream, or bacon. The directions thus given are indefinite as to the actual amount of a patient's food, but after a series of visits from the patient a fairly definite relative measure is reached; for according to his condition the patient is advised to continue with the same amounts or to reduce or increase certain kinds of food. There is, moreover, a controlling factor in regulating the diet, namely, the examination every day by the patient of the urine for glucose. By keeping watch, he can generally manage to so arrange his diet that a constant sugar-free condition results, so long as he is free from infections.

GASTROINTESTINAL CLASS

The Gastrointestinal Class has been conducted one morning a week in the Out-Door Department. The purposes of the Class have been (1) the division of patients into the ambulatory and hospital cases; (2) the further study and treatment of the ambulatory cases; and (3) to act as a consultant on abdominal conditions to the physicians in charge of the general medical clinic.

Whenever it seemed proper patients with organic gastrointestinal disease were treated as ambulatory cases. This was done because it is usually imperative, for economic reasons, that an out-door patient be kept at his vocation. This plan of treatment was not always successful; in which event the patients were admitted to the hospital. But ambulatory treatment was successful sufficiently often seemingly to justify its trial in selected cases. A study of the social and economic conditions in relation to the physical state and treatment

of the individual patient increased the success of ambulatory treatment.

The investigation of the results obtained, in selected cases, of the treatment of the so-called gastrointestinal neuroses along the lines of general hygiene and psychotherapy was begun last year. It has been continued this year with better results; due to the more proper selection of cases suitable for such lines of treatment.

RENAL CLASS

The loss of our nurse and social worker, Miss Griffin, for lack of financial assistance, has handicapped the social service function of the Class. Few visits outside the hospital have been possible and as a result we have lost touch with a small number of our patients. During the second half year, by an arrangement with Miss Hall, the hospital dietitian, we have had the aid for part time work of one of the assistant dietitians. Such an arrangement is obviously very helpful and will be increasingly so when this worker becomes more familiar with this type of patient. Our experience of over a year with the nephritic diet sheet mentioned in the last report has convinced us that it has solved the problem of regulating the protein in the diet of the ambulant nephritic. 'The patients have no difficulty in selecting a very varied diet and at the same time are able to keep within the limits of the prescribed diet. This contribution can be traced directly to the Renal Class.

The accumulation of data on observations of our patients from time to time continues. It is exceedingly slow but exceedingly important. It is teaching us more and more about the course of this disease. One of the three patients who died during the year illustrates the importance of this function of the Class. This patient we were able to follow almost from the onset of the acute nephritis in 1917 through the various stages of the chronic disease to death. Fortunately, too, we were able

REPORT OF THE ACTING PHYSICIAN-IN-CHIEF

to study the kidneys post mortem. Such an observation of the entire course of this disease is a distinct rarity. Other similar cases are under observation.

Syphilis Class

The policy of the Syphilis Class has been to treat a few cases thoroughly rather than a great number incompletely. It is the plan to keep constantly in touch with the members of the Class, through the Social Service Department if necessary, until the blood Wassermann has been repeatedly negative and lumbar puncture has excluded latent central nervous trouble.

In primary or secondary syphilis patients are immediately referred to the hospital for ten to twelve days, where small doses of mercury and arsphenamine are given on alternate days. Subsequently, overnight hospital visits are made at weekly intervals for arsphenamine, and patients report from time to time to the Syphilis, Class where the general plan of treatment is explained to them.

Late syphilis cases are referred to the hospital for lumbar puncture at some time during the course of their treatment. However, scarcely a third of all the outpatient cases have lumbar puncture. This is largely attributable to the difficulty the dispensary patient seems to have in appreciating the importance of the procedure.

While the ideal treatment in central nervous system cases would seem to be intravenous and intraspinous arsphenamine and intramuscular mercury, this is impracticable with a large number who are unable to give time and money for such a complete course. In such instances arsphenamine and mercury courses are alternated, iodides accompanying the mercury course. In these cases spinal fluid serology and cytology and the patient's clinical condition control treatment, neither being considered independently.

Special Studies

During 1920 the following papers were published by members of the visiting and resident staff. They represent such special studies as were completed in time for publication during the year.

- Christian. Defects in Membranous Bones, Exophthalmos and Diabetes Insipidus; an Unusual Syndrome of Dyspituitarism. Med. Clinics of No. America, 1920, Vol. III, p. 849.
- ——The National Research Council. Southern Med. Jour., 1920, Vol. XIII, p. 3.
- ——Deficiencies in Our Methods for the Treatment of Chronic Nephritis. Jour. of the Am. Med. Assoc., 1920, Vol. LXXIV, p. 1615.
- ——Bright's Disease with Special Reference to Treatment. Southern Med. Jour., 1920, Vol. XIII, p. 545.
- The Hospital and the Doctor of To-day in Relation to Medicine of the Present and the Future. The Virginia Med. Monthly, 1920, Vol. XLVII.
- ——Coöperation for Physicians. Chicago Med. Record, 1920, Vol. XLII, p. 459.
- ——Present-Day Medicine. Oxford Medicine, Vol. I, p. 3, New York, 1920.
- Tests of Function. Oxford Medicine, Vol. I, p. 685, New York, 1920.
- ——Purpura and Allied Conditions. Oxford Medicine, Vol. II, p. 781, New York, 1920–1921.
- —Editor, with Sir James Mackenzie, of Oxford Medicine, six volumes, New York, 1920.
- Frothingham. Diseases of the Kidney. Nelson's Loose Leaf Living Medicine, Vol. IV, p. 660, New York, 1920.
- Peabody. Advanced Heart Failure Cardiac Dyspnœa. Nelson's Loose Leaf Living Medicine, Vol. IV, p. 301, New York, 1920.

- ADKINSON. The Behavior of Bronchial Asthma as an Inherited Character. Genetics, 1920, Vol. V, p. 363.
- Bulger. Blood Changes in a Case of Hemophilia after Transfusion. Jour. of Lab. and Clinical Med., 1920, Vol. VI, p. 102.
- Cunningham. A Method for the Permanent Staining of Reticulated Red Cells. Arch. of Int. Med., 1920, Vol. XXVI, p. 405.
- Cunningham and Aub. Studies in Experimental Traumatic Shock. II. The Oxygen Content of the Blood. Jour. of Physiology, 1920, Vol. LIV, p. 408.
- LEVINE. The Potency of Some French Digitalis Preparations. Boston Med. and Surg. Jour., 1920, Vol. CLXXXII, p. 64.
- ——Acute Cardiac Upsets Occurring During or Following Surgical Operations. Jour. Am. Med. Assoc., 1920, Vol. LXXV, p. 795.
- LEVINE AND CUNNINGHAM. The Margin of Safety of Intravenous Digitalis in Cats. Arch. Int. Med., 1920, Vol. XXVI, p. 293.
- McClure. Gout: A Report of 13 Cases with Tophi, and Remarks on the Symptomatology, Metabolism, and Therapy. Med. Clinics of No. America, 1920, Vol. III, p. 957.
- McClure and Reynolds. Gastric and Duodenal Ulcers: Typical and Atypical Forms; the Relative Values of Diagnostic Procedures. Boston Med. and Surg. Jour., 1920, Vol. CLXXXIII, p. 321.
- ——Interpretation of Roentgen-Ray Findings in the Diagnosis of Peptic Ulcer. Jour. Am. Med. Assoc., 1920, Vol. LXXIV, p. 711.
- McClure, Reynolds and Schwartz. On the Behavior of the Pyloric Sphincter in Normal Man. Arch. of Int. Med., 1920, Vol. XXVI, p. 410.
- O'HARE. Vascular Hypertension: Report of Two Cases, One with Autopsy. Med. Clinics of No. America, 1920, Vol. III, p. 937.

- Vascular Reactions in Vascular Hypertension. Am. Jour. Med. Sciences, 1920, Vol. CLIV, p. 369.
- ----Vascular Hypertension. Rhode Island Med. Jour., 1920, Vol. III, p. 103.
- ----Renal Function in Vascular Hypertension. Boston Med. and Surg. Jour., 1920, Vol. CLXXXII, p. 345.
- ——Glucose Tolerance Test in Chronic Vascular Hypertension. Am. Jour. Med. Sciences, 1920, Vol. CLX, p. 366.
- O'HARE AND WALSH. A Nephritic Diet Sheet. Am. Jour. Med. Sciences, 1920, Vol. CLIX, p. 883.
- STURGIS AND TOMPKINS. A Study of the Correlation of the Basal Metabolism and Pulse Rate in Patients with Hyperthyroidism. Arch. Int. Med., 1920, Vol. XXVI, p. 467.
- Walker. Frequent Causes and the Treatment of Perennial Hay Fever. Jour. of the Am. Med. Assoc., 1920, Vol. LXXV, p. 782.
 - Two Cases of Fibrinous Bronchitis. Am. Jour. Med. Sciences, 1920, Vol. CLIX, p. 825.
- Further Studies on the Types of Streptococci Found in the Sputum of Bronchial Asthmatics. Jour. Med. Res., 1920, Vol. XLI, p. 457.
- ——Bronchial Asthma. Oxford Medicine, Vol. II, p. 217, New York, 1920.
- ——Hay Fever. Oxford Medicine, Vol. II, p. 243, New York, 1920.
- West. Clinical Studies on the Respiration: VI. A Comparison of Various Standards for the Normal Vital Capacity of the Lungs. Arch. of Int. Med., 1920, Vol. XXV, p. 306.
- West and Pratt. Clinical Experience with a Standardized Dried Aqueous Extract of Digitalis. Jour. Am. Med. Assoc., 1920, Vol. LXXV, p. 77.

HENRY A. CHRISTIAN,

Physician-in-Chief.

Register of Present Members of the Staff

ABBREVIATIONS

P.B.B.H. — Peter Bent Brigham Hospital Harv. — Harvard University
B.C.H. — Boston City Hospital H.M.S. — Harvard Medical School
J.H.H. — Johns Hopkins Hospital J.H.M.S. — Johns Hopkins Medical
M.G.H. — Massachusetts General School
Hospital H.O. — House Officer

Adams, Frank Dennette

Litt.B., Princeton, 1913; M.D., H.M.S., 1917; Med. H.O., M.G.H., 1917–18; 1st Lieut., M.C., U.S. Army, June 1918–Sept. 1919; Pathol. H.O., P.B.B.H., Oct. 1, 1919–Mar. 15, 1920; Acting Res. Pathol., P.B.B.H., Mar. 15, 1920–July 1, 1920; Res. Phys., B.C.H.

Bailey, Percival

B.S., Univ. of Chicago, 1914; Ph.D., *ibid.*, 1918; M.D., Northwestern Univ. Med. School, 1918; Asst. in Embryology, Univ. of Chicago, 1914; Asst. in Anatomy, *ibid.*, 1915; Asst. in Anatomy, Northwestern Univ. Med. School, 1916–18; Assoc. in Neurol., P.G. Med. School, Chicago, 1918–19; Asst. Res. Surg., P.B.B.H., April 1, 1919–Dec. 19, 1919; Res. Phys., Neurol. Service, Cook County Hosp., Chicago, Jan. 1, 1920–July 1, 1920; Res. Phys., Psychopathic Hosp., Chicago, July 1, 1920–Sept. 1, 1920; Assoc. in Surg., P.B.B.H.

Boggs, Arthur Gordon

A.B., Dartmouth, 1915; M.D., H.M.S., 1919; Surg. H.O., P.B.B.H., March 15, 1919-July 1, 1920; New Haven Hospital, New Haven, Conn.

Brewster, Albert H.

B.A., Univ. of Va., 1914; M.D., J.H.M.S., 1918; M.C., U.S. Army, 1917–19; Children's Hosp. Sch., Baltimore, Md., Sept. 1919–Feb. 1920; Surg. H.O., P.B.B.H.

BRIGHAM, FERDINAND

A.B., Tufts College, 1912; D.M.D., Harv. Dental Sch., 1915; *Dental Surgeon*, *P.B.B.H.*, *March 13*, 1919–Jan. 20, 1920; Capt., R.A.M.C., June 1915–Jan. 1919.

BRITTINGHAM, HAROLD HIXON

A.B., Yale, 1916; M.D., H.M.S., 1920; Med. H.O., P.B.B.H.

Brown, William Eustis

Ph.B., Lafayette Coll., 1909; C.P.P., Harvard-M.I.T., Sch. of Public Health, 1915; M.D., H.M.S., 1920; Surg. H.O., P.B.B.H.

CANNON, WALTER BRADFORD

A.B., Harv., 1896; A.M., *ibid.*, 1897; M.D., H.M.S., 1900; C.B. (military), 1919; Instr. in Zoology, Harv., 1899–1900; Instr. in Physiol., H.M.S.,

1900–02; Asst. Prof. Physiol., H.M.S., 1902–06; Geo. Higginson Prof. Physiol., H.M.S.; Consulting Physiol., P.B.B.H.; Fellow Am. Acad., 1906; Mem. Am. Philos. Soc., 1908; Mem. Nat. Acad. of Sciences, 1914; Croonian Lecturer, Royal Society, London, 1918; Corresponding Member, Société de Biologie, Paris, 1919; Lieut. Col., M.C., U.S. Army.

CHEEVER, DAVID

A.B., Harv., 1897; M.D., H.M.S., 1901; Surg., H.O., B.C.H., 1901-03; Asst. in Anat., H.M.S., 1903-08; Asst. Visit. Surg., B.C.H., 1905-12; Demonstr. in Anat., H.M.S., 1908-13; Surg., P.B.B.H.; Asst. Prof., Surg. Anatomy, H.M.S.; Asst. Prof. of Surgery, H.M.S.; Chief Surg., 2nd Harv. Unit, B.E.F., France, Dec. 1915-March 1916.

CHELEY, GLEN EVAN

A.B., Colorado Coll., 1916; M.D., H.M.S., 1920; Surg. H.O., P.B.B.H.

CHRISTIAN, HENRY ASBURY

A.B. & A.M., Randolph-Macon, 1895; Grad. Stud., *ibid.*, 1895–96; M.D., J.H.M.S., 1900; A.M., Harv., 1903; Asst. Pathol., B.C.H., 1900–02; Asst. Visit. Pathol., *ibid.*, 1902–05; Asst. Visit. Pathol., Children's Hosp., Boston, 1902–05; Instr. in Pathol., H.M.S., 1902–05; Asst. Visit. Phys., Long Island Hosp., Boston, 1905; in charge of Medical Students, M.G.H., 1905–07; Instr. in Theory & Practice of Physic, H.M.S., 1905–07; Asst. Prof. in Theory & Practice of Physic, H.M.S., 1907–08; Phys.-in-Chief, Carney Hosp., Boston, 1907–12; Dean, Faculty of Med. & of Med. School, Harv., 1908–12; *Phys.-in-Chief*, *P.B.B.H.*; Fellow Am. Acad.; Hersey Prof., Theory & Practice of Physic, H.M.S.; Major, M.R.C., U.S. Army; Chairman, Div. of Med. Sciences, Nat'l. Research Council, Washington, D. C., Oct. 1, 1919–Oct. 1, 1920.

*Cunningham, Thomas Donald

B.S., Dartmouth, 1913; M.D., H.M.S., 1918; House Pupil. M.G.H., Nov. 1, 1917-Nov. 1, 1918; Asst. Res. Phys., P.B.B.H., March 1, 1919-July 1, 1920.

Cushing, Harvey

A.B., Yale, 1891; A.M. & M.D., Harv., 1895; Hon. F.R.C.S., London, 1913, and Ireland, 1918; Hon. A.M., Yale, 1913; Hon. M.D., Queen's Univ., Bristol, 1918; D.Sc., Washington Univ., 1915, and Yale, 1919; LL.D., Western Reserve Univ., 1919, and Univ. of Cambridge, Eng., 1920; House Pupil, M.G.H., 1895–96; Res. Surg., J.H.H., 1896–1900; successively Asst. Instr. & Assoc. Prof. in Surg., J.H.M.S., 1898–1912; Fellow Am. Acad., 1914; Mem. Wash. Acad. Sci., 1916; Mem. Nat. Acad. Sci., 1917; Surg.-in-Chief, P.B.B.H.; Moseley Prof. of Surg., H.M.S.; Director, U.S. Army, Base Hosp. No. 5, 1916–19, Col., M.C., U.S. Army.; Companion of the Bath (military).

Cutler, Elliott Carr

A.B., Harv., 1909; M.D., H.M.S., 1913; Surg. H.O., P.B.B.H., Nov. 1, 1913-March 1, 1915; Res. Surg., Harv. Unit, Am. Ambulance Hosp., Paris, France, April-June, 1915; Res. Surg., M.G.H., Aug. 1915-Sept. 1916; Alumni Asst. in Surg., H.M.S., 1915-16; Vol. Asst., Rockefeller Inst., N. Y. City, Oct. 1916-May 1917; Major, M.C., U.S. Army, May 1917-May 1919; Instr. in Surg., H.M.S.; Res. Surg., P.B.B.H.

REGISTER OF PRESENT MEMBERS OF THE STAFF

*Davidson, Leonard Tomb B.S., Oberlin, 1912; M.D., J.H.M.S., 1919; Med. H.O., P.B.B.H., Sept. 15, 1919-Nov. 1, 1920.

DAY, HILBERT FRANCIS

Ph.B., Yale, 1901; M.D., H.M.S., 1905; Surg. H.O., B.C.H., Oct. 1905–Nov. 1907; House Phys., Boston Lying-In Hosp., Nov. 1907–July 1908; 3rd Asst. Visit. Surg., B.C.H. (Gynecol. Dept.), 1908–09; 4th Asst. Visit. Surg., B.C.H., 1909; District Phys., Boston Dispensary, Oct. 1909–Oct. 1912; Asst. to Surgeons, Boston Dispensary, Nov. 1911–Nov. 1912; Surg., Maverick Dispensary, E. Boston, 1913–14; Asst. Surg., Boston Dispensary, Nov. 1912–Aug. 1914; Surg., Boston Dispensary, Aug. 1914–Feb. 1919; Assoc. in Surg., P.B.B.H.; 1st Asst. Surg. Beth Israel Hosp., 1917–18; Asst. in Surg., H.M.S.; Fellow, Am. Coll. of Surg.; Surg.-in-Chief, Boston Dispensary.

*Denny, George Parkman

A.B., Harv., 1909; M.D., H.M.S., 1913; Med. H.O., P.B.B.H., June 1, 1913-July 1, 1914; Vol. Lab. of Physiol. Research, J.H.M.S., 1914-15; Alumni Asst. in Med., H.M.S., 1915-16; Assoc. in Med., P.B.B.H.; Phys. to Med. Students, H.M.S.; Capt., M.C., U.S. Army; Attending Phys., Channing Home, Boston.

EMERY, JR., EDWARD STANLEY
A.B., Harv., 1916; M.D., H.M.S., 1920; Med. H.O., P.B.B.H.

FISKE, SEYMOUR

A.B., Univ. of Wis., 1916; M.D., Univ. of Pa., 1920; Vol. Asst. in Pathol., P.B.B.H., June 23, 1919-Sept. 21, 1919; Med. H.O., P.B.B.H.

FLEMING, HOWARD

A.B., Univ. of Cal., 1914; M.D., *ibid.*, 1917; Med. & Surg., H.O., San Francisco Hosp., for 8 mos.; Capt., M.C., U.S. Army; Asst. Res. Surg., San Francisco Hosp., July-Dec. 1919; Asst. Res. Surg., P.B.B.H.

Foley, Frederic E. B.

Ph.B., Yale, 1913; M.D., J.H.M.S., 1918; Asst. in Pathol., J.H.M.S., 1918-19; Lab. for Surg. Research, H.M.S., 1919-20; Surg. H.O., P.B.B.H.

FOLIN, OTTO

S.B., Univ. of Minn., 1892; Ph.D., Univ. of Chicago, 1898; Sc.D., Washington Univ., 1915; Sc.D., Univ. of Chicago, 1916; Hon. M.D., Lund, 1918; Mem. Nat. Acad., 1916; Student, Univs. of Sweden & Germany, 1897 & 1898; Asst. Prof. of Physiol. Chem., Univ. of W. Va., 1899–1900; Research Chem., McLean Hosp., Waverley, 1900–08; Assoc. Prof. of Biol. Chem., H.M.S., 1907–09; Hamilton Kuhn Prof. of Biol. Chem., H.M.S.; Chem., M.G.H.; Consulting Chem., P.B.B.H.

FROTHINGHAM, CHANNING

A.B., Harv., 1902; M.D., H.M.S., 1906; Med. H.O., B.C.H., 1906–07; Asst. Visit. Phys., Carney Hosp., O.P.D., Boston, 1908–12; Sec'y, Faculty of Med., Harv., 1908–13; Asst. in Theory & Practice of Physic, H.M.S., 1908–13; Instr. in Med., H.M.S.; *Phys.*, *P.B.B.H.*; Lieut. Col., M.C., U.S. Army, June 1, 1917–Dec. 5, 1918.

GRANT, SAMUEL BECHER

B.S., Washington Univ., 1918; M.D., Washington Univ. Sch. of Med., 1920; Med. H.O., P.B.B.H.

GRAVES, ROGER COLGATE

A.B., Syracuse Univ., 1913; M.D., Syracuse Univ. Med. School, 1918; Surg. H.O., P.B.B.H., Aug. 15, 1918-Oct. 19, 1919; Asst. Res. Surg., New Haven Hosp., New Haven, Conn., Nov. 1919-July 1920; Asst. Res. Surg., P.B.B.H.

GREENSPON, EDWARD A.

M.D., McGill Univ. 1916; House Bacteriologist, Royal-Victoria Hosp., Montreal, 1916–17; Asst. Res. Pathol., J.H.H., 1917–18; Capt., Canadian Army Med. Corps; Res. Pathol., P.B.B.H., Oct. 1, 1919–April 1, 1920; Med. H.O., P.B.B.H.

HARBIN, ROBERT MAXWELL

B.S., Univ. of Georgia, 1916; M.D., H.M.S., 1920; Surg., H.O., P.B.B.H.

Homans, John

A.B., Harv., 1899; M.D., H.M.S., 1903; House Pupil, M.G.H., 1903-04; Asst. in Hunterian Lab., J.H.M.S., 1908-09; Vol. Asst. Surg., Children's Hosp., Boston, 1909-10; Surg., M.G.H., O.P.D., 1910-12; Asst. in Surg., H.M.S., 1910-13; Surg., P.B.B.H.; Surg., Boston Dispensary, 1913-14; Assoc. in Surg., H.M.S., 1914-15; Instr. in Surg., ibid.; Major, M.C., U.S. Army, June 1918-June 1919.

HORRAX, GILBERT

A.B., Williams, 1909; M.D., J.H.M.S., 1913; Surg. H.O., P.B.B.H., July 1, 1913-Nov. 1, 1914; Arthur Tracy Cabot Fellow in charge of Lab. of Surg. Research, H.M.S., 1914-15; Asst. Res. Surg., P.B.B.H., Nov. 1, 1915-Nov. 1, 1916; Alumni Asst. in Surg., H.M.S.; Res. Surg., M.G.H., Nov. 1, 1916-May 1, 1917; Major, M.C., U.S. Army, May 5, 1917-April 30, 1919; Assoc. in Neurol. Surg., P.B.B.H.

Howland, Joseph Briggs

M.D., H.M.S., 1896; Surg. House Pupil, M.G.H., 1896–97; Asst. Phys., State Hosp., Tewksbury, Mass., 1898–1901; Asst. Supt., *ibid.*, 1901–02; Supt. State Colony for the Insane, Gardner, Mass., 1902–07; Asst. Res. Phys., M.G.H., 1907–17; Asst. Administrator, *ibid.*, 1908–17; Acting Administrator & Res. Phys., *ibid.*, July 1917–May 1919; Supt., P.B.B.H.; Pres. Am. Hosp. Ass'n, Sept., 1919–Oct. 1920; Mem. Mass. State Board of Registration of Nurses.

JACK, EDWIN EVERETT

A.B., Harv., 1884; M.D., H.M.S., 1887; Acting Consulting Ophthalmologist, P.B.B.H.

JACKSON, HOWARD BURR

A.B., Harv., 1915; M.D., H.M.S., 1919; Med. H.O., P.B.B.H., March 15, 1919-April 1, 1920; H.O., Surg. & Obstet. Services, Mass. Homeopathic Hosp., April 1, 1920-Sept. 1, 1920; Private Practice, Jamaica Plain, Mass.

JACOBSON, CONRAD

B.S., Beloit, 1900; Grad. Stud., 3 summer qrs., Univ. of Chicago; Asst. Prof. of Chem. & Bacteriology, Armour Inst. of Technology, 1903-05; Research Asst. in Pathol., Univ. of Chicago, 1907-08; M.D., J.H.M.S.,

REGISTER OF PRESENT MEMBERS OF THE STAFF

1911; Asst. in Surg., Hunterian Lab., J.H.M.S., 1911-12; Asst. Res. Surg., P.B.B.H., Sept. 1, 1912-Sept. 1, 1915; Asst. in Surg., H.M.S.; Res. Surg. P.B.B.H., Sept. 1, 1915-July 1, 1920; Assoc. Prof. of Surg., Univ. of Minn. Med. School.

JACOBSON, VICTOR CLARENCE

S.B., Wisconsin, 1915; M.D., H.M.S., 1917; Med. H.O., P.B.B.H., July 18, 1917-July 1, 1918; 1st Lieut., M.C., U.S. Army, July 8, 1918-Dec. 13, 1918; Pathol. H.O., P.B.B.H., Jan. 1, 1919-July 1, 1919; Res. Pathol., P.B.B.H., July 1, 1919-Oct. 1, 1919; Asst. Prof. of Pathol., Univ. of Wisconsin, 1919-20; Res. Pathol., P.B.B.H.; Instr. in Pathol., H.M.S.

Jameson, Charles Harold

A.B., Harv., 1916; M.D., H.M.S., 1919; Surg. H.O., P.B.B.H., June 15, 1919-Nov. 1, 1920; Free Hosp. for Women, Brookline.

KAZANJIAN, VAROZTAD H.

D.M.D., Harv. Dental School, 1905; Member Harvard Unit with B.E.F., 1915–1916; Surgical Specialist for Wounds of Jaws and Face, B.E.F., 1916–1919; C.M.G.; *Dental Surg.*, *P.B.B.H*.

KEBABJIAN, HRANT SETRAG

A.B., Anatolia College (Armenia), 1913; M.D., H.M.S., 1918; Admitting Phys., Babies' Ward, Post Grad. Hosp., N. Y. City, March 1918–Sept. 1918; Surg. H.O., P.B.B.H., Nov. 15, 1918–March 1, 1920; City Phys., Buffalo, N. Y.

KEEGAN, JOHN JAY

A.M., Univ. of Neb., 1912; M.D., *ibid.*, 1915; Instr. in Anatomy, *ibid.*, 1915–17; *Pathol. H.O.*, *P.B.B.H.*, *June 15*, 1917–Dec. 15, 1917; Lieut., M.C., U.S. Navy, Dec. 15, 1917–Aug. 9, 1919; Surg. H.O., P.B.B.H., Aug. 13, 1919–Nov. 1, 1920; Asst. Prof. of Pathol., Univ. of Neb.

LANMAN, THOMAS HINCKLEY

A.B., Harv., 1912; M.D., H.M.S., 1916; Assoc. in Urol., P.B.B.H.

LEVINE, SAMUEL ALBERT

A.B., Harv., 1911; M.D., H.M.S., 1914; Assoc. in Med., P.B.B.H., July 1, 1914–July 1, 1915; Med. H.O., P.B.B.H., July 1, 1915–Nov. 1, 1916; Moseley Travelling Fellow; Asst., Rockefeller Inst. Hosp., N. Y. City, Nov. 1916–June 1917; Capt., M.C., U.S. Army, June 1917–July 1919; Assoc. in Med., P.B.B.H.

Locke, Jr., Charles Edward

A.B., Univ. of Cal., 1916; M.D., Univ. of Cal., 1919; H.O., Univ. of Cal. Hosp., 14 mos.; Asst. Res. Surg., P.B.B.H.

Louria, Henry Walter

A.B., Columbia Coll., 1916; M.D., Coll. of Phys. & Surg., 1919; Surg. H.O., Presbyterian Hosp., N. Y. City, April 1919–July 1920; Med. H.O., P.B.B.H.

LYNCH, JR., JAMES JOSEPH

B.S., Notre Dame Univ., 1915; M.D., H.M.S., 1919; H.O., Boston Lying-In Hosp., Jan. 1, 1919–July 1, 1919; *Med. H.O.*, *P.B.B.H.*, *July 1*, 1919–July 1, 1920; H.O., Cambridge City Hosp.

MacPherson, Donald John

B.S., Univ. of Rochester, 1911; M.D., H.M.S., 1915; Med. H.O., P.B.B.H., July 1, 1915-Nov. 1, 1916; Asst. Res. Phys., P.B.B.H., Nov. 1, 1916-June 22, 1917; Capt., M.C., U.S. Army, May 15, 1917-Aug. 25, 1919; Assoc. in Med., P.B.B.H.

McClure, Charles Walter

A.B., Ohio State Univ., 1906; M.D., Starling Med. Coll., O., 1910; Med. H.O., St. Francis Hosp., Columbus, O., 1910–11; Asst. in Clin. Med., Starling Med. Coll., O., 1911–12; Asst. in Med., Univ. of Iowa Med. School, 1912–15; Grad. Stud. in Med., H.M.S., 1915–16; Asst. Res. Phys., P.B.B.H., July 1, 1916–Nov. 1, 1916; Alumni Asst. in Med., H.M.S.; Res. Phys., P.B.B.H., June 7, 1917–July 6, 1917; Phys.-in-Chief, St. Luke's Hospital, South Bethlehem, Pa., Aug. 1, 1917–March 1, 1918; Capt., M.C., U.S. Army, March 1, 1918–Dec. 24, 1918; Assoc. in Med., P.B.B.H.

McKean, Richard M.

A.B., Univ. of Mich., 1916; M.D., ibid., 1919; Med. H.O., P.B.B.H.

Morris, Laird M.

M.D., Univ., of Cal. 1916; Asst. Res. Phys., P.B.B.H., April 15, 1920-Oct. 1, 1920.

NELLANS, CHARLES T.

B.S., Univ. of Chicago, 1916; M.D., Rush Med. Coll., 1918; Mem. Res. Staff, Presbyterian Hosp., Chicago, Jan. 1, 1918–Sept. 1, 1919; Med. H.O., P.B.B.H., Sept. 15, 1919–Nov. 1, 1920; Asst. in Med., Yale Med. School.

NEWTON, FRANCIS CHANDLER

A.B., Amherst, 1915; M.D., H.M.S., 1919; Surg. H.O., P.B.B.H., March 15, 1919-July 1, 1920; Asst. Res. Surg., P.B.B.H.

Nichols, 3D, Andrew

A.B., Harv., 1912; M.D., H.M.S., 1916; Surg. H.O., B.C.H., Nov. 1916-Sept. 1917; Capt., M.C., U.S. Army, Sept. 15, 1917-June 20, 1919; 2nd Asst. Supt., P.B.B.H.

*Novy, Robert Lev

A.B., Univ. of Mich., 1913; M.S., ibid., 1914; M.D., ibid., 1919; Med. H.O., P.B.B.H., April 15, 1919-April 1, 1920.

O'CONOR, VINCENT JOHN

B.S., Univ. of Mich., 1915; M.D., Rush Med. Coll., 1917; Surg. H.O., P.B.B.H., Jan. 1, 1917–Jan. 1, 1918; House Surgeon, Presbyterian Hosp., Chicago, Ill., Jan. 19, 1918–June 15, 1918; 1st Lieut., M.C., U.S. Army, July 1, 1918–Feb. 4, 1919; Asst. Res. Surg., P.B.B.H., Feb. 15, 1919–July 15, 1920.

O'HARE, JAMES PATRICK

A.B., Harv., 1908; M.D., H.M.S., 1911; Med. H.O., B.C.H., So. Dept., July 1, 1911–Oct. 1, 1911; Med. H.O., Carney Hosp., Boston, 1912–13; Fellow in Med., H.M.S., 1913–15; Asst. Visit. Phys., Carney Hosp., 1913–15; Asst. Visit. Phys., B.C.H., 1915–17; Assoc. in Med., P.B.B.H.; Asst. in Med., H.M.S.; Acting Phys., P.B.B.H., Aug. 1, 1917–Feb. 1, 1918, and April 1, 1918–Jan. 1, 1919; Instr. in Med., H.M.S.

*Ormond, Alexander T.

A.B., Princeton, 1912; M.D., J.H.M.S., 1919; Surg. H.O., P.B.B.H.

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*PARKINS, LEROY EDWARD

A.B., Simpson College, 1912; M.D., H.M.S., 1918; Asst. Res., Boston Consumptives' Hosp.; Asst. Res., So. Dept., B.C.H.; Surg. H.O., P.B.B.H., Dec. 1, 1918-March 1, 1920; Private Practice, Douglas, Wyoming.

PEABODY, FRANCIS WELD,

A.B., Harv., 1903; M.D., H.M.S., 1907; House pupil, M.G.H., 1907–08; Asst. Res. Phys., J.H.H., 1908–09; Fellow in Pathol., J.H.U., 1909–10; Stud. of Chem., Univ. of Berlin, Germany, 1910; Asst. Res. Phys., Hosp. of Rockefeller Inst., 1911–12; Asst., Rockefeller Inst., 1911–12; Res. Phys., P.B.B.H., Nov. 1, 1912–Sept. 1, 1915 (granted leave of absence, March 1, 1914–Jan. 1, 1915, to serve as a member of the China Medical Commission of the Rockefeller Foundation); Asst. Visit. Phys., P.B.B.H., Sept. 1, 1915–Dec. 9, 1915; Alumni Asst. in Med., H.M.S., 1913–15; Asst. Prof. of Med. H.M.S.; Consulting Phys., Collis P. Huntington Memorial Hosp., Boston, Mass.; Phys., P.B.B.H. (leave of absence Aug. 1, 1917–Feb. 1, 1918, to serve as a member of the American Red Cross Comm. to Roumania); Major, M.C., U.S. Army, April 1918–Jan. 1919; Assoc. Prof. of Med., H.M.S.

PECK, EUGENE CURTIS

A.B., Harv., 1916; M.D., H.M.S., 1919; Med. H.O., P.B.B.H., July 1, 1919–July 1, 1920; Instr. in Physiological Chem., Tulane Univ. of Louisiana Med. School.

POTTER, WILLIAM HENRY

A.B., Harv., 1878; D.M.D., Harv. Dental School, 1885; Mem. Am. Acad. of Dental Science; Demonstr. in Operative Dentistry, Harv. Dental School, 1887–88; Clin. Lecturer, *ibid.*, 1890–1896; Lect., *ibid.*, 1896–1900; Asst. Prof., *ibid.*, 1900–04; Prof. of Operative Dentistry, *ibid.*; in practice, Boston; Consulting Dental Surg., P.B.B.H.; Lieut. Col., Dental Corps, U.S. Army, May 7, 1917–April 29, 1919.

PRICE, JAMES VALENTINE

A.B., Univ. of N. C., 1915; M.D., J.H.M.S., 1919; Surg. H.O., P.B.B.H.

QUINBY, WILLIAM CARTER

A.B., Harv., 1899; M.D., H.M.S., 1902; House Pupil, M.G.H., 1902-03; Asst. G.U. Surg., Boston Dispensary, 1907-09; Asst. Surg., N. E. Baptist Hosp., Boston, 1908-14; in charge of Experimental Surg., Brady Clinic, J.H.H., Sept. 1914-June 1916; Assoc. in Urology, J.H.M.S., 1915-16; Instr. in Surg., H.M.S.; Director of Lab. for Surg. Research, H.M.S.; Urological Surgeon, P.B.B.H.

REYNOLDS, LAWRENCE

A.B., Univ. of Ala., 1912; M.D., J.H.M.S., 1916; Capt., M.C., U.S. Army, July 28, 1917-May 1, 1919; Roentgenologist, P.B.B.H.

SCHUMACHER, IRWIN C.

A.B., Univ. of Cal., 1915; M.D., J.H.M.S., 1919; Asst. Res. Phys., P.B.B.H.

SCHWARTZ, CHARLES WADSWORTH

Ph.B., Yale, 1914; M.D., H.M.S., 1919; H.O., X-Ray Dept., P.B.B.H., Feb. 20, 1919-Feb. 20, 1920; Roentgenologist, N. Y. Neurol. Institute.

SMITH, BARNEY BARR

M.D., Jefferson, 1917; H.O., Phila. Jewish Hosp., Pa., 1917–18; 1st Lieut., M.C., U.S. Army, 1918–19; Asst., X-Ray Dept., Lincoln & Beth Israel Hosps., N. Y. City, 1920; H.O., X-Ray Dept., P.B.B.H.

STONE, ERIC PERCY

B.S., Harv., 1914, as of 1915; M.D., H.M.S., 1918; Surg. H.O., P.B.B.H., May 15, 1918–July 1, 1919; Asst. Res. Surg., P.B.B.H., Oct. 1, 1919–June 15, 1920; Externe, Gynecological Service, R. I. Hosp.; Externe, Urological Service, Providence City Hosp., R. I.

STONE, GEORGE HENRY

A.B., Bowdoin, 1905; M.D., Bowdoin Med. School, 1908; H.O., Maine Gen. Hosp., 1908–09; in practice, Clinton, Mass., 1909–11; H.O., B.C.H., Jan. 1912–Jan. 1913; Executive Asst., B.C.H., Jan. 1913–Feb. 1915; 3rd Asst. Supt., P.B.B.H., Feb. 1, 1915–May 1, 1917; 2nd Asst. Supt., P.B.B.H., May 1, 1917–July 1, 1919; Capt., M.C., U.S. Army, Oct. 26, 1918–Feb. 10, 1919; Capt., Med. Sec., Officers' Reserve Corps, U.S. Army, March 20, 1919; 1st Asst. Supt., P.B.B.H.

Sturgis, Cyrus Cressey

B.S., Univ. of Wash., 1913; M.D., J.H.M.S., 1917; Med. H.O., P.B.B.H., Oct. 15, 1917-Aug. 22, 1918; 1st Lieut., M.C., U.S. Army, Aug. 23, 1918-July 1, 1919; Asst. Res. Phys., P.B.B.H., Aug. 25, 1919-April 15, 1920; Res. Phys., P.B.B.H.

TEMPLETON, EARL R.

B.S., Colgate Univ., 1914; M.D., Syracuse Univ. Med. School, 1920; Pathol. H.O., P.B.B.H.

WALKER, ISAAC CHANDLER

A.B., J.H.U., 1905; M.D., J.H.M.S., 1909; Grad. Stud., Lab. of Theory & Practice of Physic, H.M.S., 1910–11; Med. H.O., Carney Hosp., Boston, 1910–11; Lect. on Clin. Microscopy & Physical Diagnosis, Univ. of Iowa, 1911–12; Stud. of Prof. Morawitz, Freiburg, Germany, 1912; Research, Rockefeller Hosp., New York City, 1912; Sr. Med. H.O., P.B.B.H., Nov. I, 1912–March I, 1913; Asst. Res. Phys., ibid., March-I, 1913–March I, 1914; Act. Res. Phys., ibid., March I, 1914–Jan. I, 1915; Asst. Res. Phys., ibid., Jan. I, 1915–March I, 1915 (granted leave of absence from March I, 1915–Sept. I, 1915); Med. Chief, Hospital Ab 32bis, Passy Yonne, France, March 1, 1915–July 1, 1915; Assoc. in Med., P.B.B.H.; Asst. in Pharmacol., H.M.S.; Alumni Asst. in Med., H.M.S.; Acting Phys., P.B.B.H., Aug. I, 1917–Feb. I, 1918, and April I, 1918–Dec. 16, 1918; Asst. Prof. of Med., H.M.S., 1918–19.

WEARN, JOSEPH TRELOAR

B.S., Davidson, 1913; M.D., H.M.S., 1917; Med. H.O., P.B.B.H., June 15, 1917-June 15, 1918; 1st Lieut., M.C., U.S. Army, Nov. 1917-Aug. 1919; Asst. Res. Phys., P.B.B.H.

WEST, HOWARD FRANK

A.B., Stanford, 1912; M.D., ibid., 1915; Interne, Lane Hosp., San Francisco, July 1915–July 1917; Asst. Res. Phys., P.B.B.H., Sept. 15, 1917–Oct. 15, 1917; Acting Res. Phys., ibid., Oct. 15, 1917–Jan. 1, 1918; Res. Phys., ibid., Jan. 1, 1918–April 15, 1920; Alumni Asst. in Med., H.M.S., Sept. 1, 1918–April 15, 1920; Practice, Internal Med., Los Angeles, Cal.

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WILSON, DAVID COLE

B.A., Univ. of Va., 1912; M.D., *ibid.*, 1919; Interne, Univ. of Va. Hosp.; *Med. II.O.*, *P.B.B.II*.

WISLOCKI, GEORGE BERWAYS

A.B., Washington Univ., St. Louis; M.D., J.H.M.S., 1916; Asst. in Anatomy, J.H.M.S., 1916–1917; Arthur Tracy Cabot Fellow, H.M.S., 1917–1920; Assoc. in Surg., P.B.B.H., March 25, 1920–Oct. 1, 1920; Dept. of Anatomy, J.H.M.S.

*Wolbach, Simeon Burt

Stud., Harv., 2 yrs.; M.D., H.M.S., 1903; 2nd Asst. in Pathol., B.C.H., 1903-04; 1st Asst. in Pathol., ibid., 1904-05; 2nd Asst. Visit. Pathol., ibid., 1905-08; Pathol., Long Island Hosp., Boston, 1905-08; Pathol., Boston Floating Hosp., 1905-08; Pathol., Mass. Infants' Asylum, 1905-08; Asst. in Pathol., H.M.S., 1905-06; Instr. in Pathol., ibid., 1906-08; Adjunct. Prof. of Pathol. & Bacteriol., Albany Med. Coll., 1908–09; Director, Bender Hygienic Lab., Albany, N. Y., 1908-09; Pathol., Albany City Hosp., 1908-09; Pathol., St. Peter's Hosp., Albany, 1908-09; Pathol., St. Margaret's House, Albany, 1908-09; Lecturer in Pathol., McGill Univ., 1909-11; Director, Histol. Lab., McGill Univ., 1909-11; Director, Montreal Gen. Hosp. Lab., 1909-11; Asst. Prof. of Bacteriol., H.M.S., 1910-14; Assoc. Prof. of Bacteriol., H.M.S., 1914-16; Pathol., Children's Hosp., Boston; Assoc. Prof. of Pathol. & Bacteriol., H.M.S.; Pathol., P.B.B.II. (on leave Jan. 1, 1920-Aug. 1, 1920, in charge of Typhus Research Hosp., Poland); Fellow Am. Acad. of Arts and Sciences, 1914; Visit. Pathol., Children's Hosp., Boston, 1915.

*Wood, NATHANIEL KNIGHT

A.B., Harv., 1897; M.D., H.M.S., 1901; H.O., B.C.H., Jan. 1902-March 1904; H.O., Boston Lying-In Hosp., June 1904-Dec. 1904; Visit. Phys., Carney Hosp., O.P.D., Oct. 1907-Oct. 1912; Visit. Phys., Boston Consumptives' Hosp., O.P.D., Jan. 1909-Jan. 1917; Phys., Boston Dispensary, Oct. 1, 1912-Dec. 1, 1918; Assoc. in Med., P.B.B.H.

WYNN, JAMES

B.S., Indiana Univ., 1917; M.D., Indiana Univ. Med. School, 1919; M.D., cum laude, ibid., 1920; Asst. Res. Phys., P.B.B.H.

YOAKAM, WAYNE ADDISON

B.S., Denison Univ., 1916; M.D., H.M.S., 1920; Surg. H.O., P.B.B.H.

* Record possibly incomplete; no reply received.

Register of Former Members of the Staff

*Alexander, Harry Louis

A.B., Williams, 1910; M.D., Columbia Univ., Coll. of Phys. & Surg., 1914; H.O., Presbyterian Hosp., N. Y. City, 1914–16; Asst. Res. Phys., P.B.B.H., Sept. 15, 1916–July 6, 1917; Major, M.C., U.S. Army; Instr. in Med., Cornell Univ. Med. Coll., N. Y.; Asst. Adjunct Attending Phys., 2nd Med. Div., Bellevue Hosp., N. Y.

Atwater, Reginald Myers

A.B., Colorado Coll., 1914; M.D., H.M.S., 1918; Med. H.O., P.B.B.H., March 1, 1918-April 15, 1919.

BAGLEY, JR., CHARLES

M.D., Univ. of Md., 1904; B.A., Loyola, 1911; Asst. Res. Phys., Univ. Hosp., Baltimore, 1904–05; Asst. Res. Surg., *ibid.*, 1905–06; Med. Supt., Hebrew Hosp., Baltimore, 1906–10; Asst. Res. Surg., P.B.B.H., Jan. 1, 1913–Jan. 1, 1914; Visit. Surg., Hebrew Hosp., Church Home & Infirmary & St. Agnes' Hosp., Baltimore; Consulting Surg., Baltimore Eye, Ear, & Throat Charity Hosp., Emergency Hosp., Annapolis, Md., & Presbyterian Eye, Ear & Throat Charity Hosp., Baltimore; Assoc. in Experimental Neurology, J.H.M.S.; Major, M.C., U.S. Army, Aug. 7, 1917–Oct. 25, 1919.

BALYEAT, RAY MORTON

A.B., Oklahoma Univ., 1912; B.S., *ibid.*, 1915; M.A., *ibid.*, 1916; M.D., *ibid.*, 1918; Med. H.O., P.B.B.H., Nov. 1, 1918–Oct. 1, 1919.

BARROW, WILLIAM HULBERT

A.B., Harv., 1908; M.D., H.M.S., 1916; Med. H.O., P.B.B.H., Nov. 1, 1916-June 17, 1917; Capt., M.C., U.S. Army.

*Benet, George

Student for 3 yrs., Univ. of S.C., & Univ. of Va.; M.D., H.M.S., 1913; Med. H.O., P.B.B.H., June 1, 1913–July 1, 1914; Sr. Surg. H.O., St. Luke's Hosp., Chicago, July 1, 1914–Jan. 1, 1915; Lab. Asst., Harv. Unit, Am. Ambulance Hosp., Paris, France, April–July 1915; Surg., at French Hosp. near Annel, 1915–16; Capt. & Asst. Surg., 2nd Harv. Unit, B.E.F., France, 1916; Res. Phys., Collis P. Huntington Mem. Hosp., Nov. 1916–April 1917; Surg., Fulham Military Hosp., London, Eng., April–Dec., 1917; M.R.C., U.S. Army, Dec. 1917–Aug. 1918; Capt., M.C., U.S. Army.

*Berry, Frank Brown

A.B., Harv., 1914; M.D., H.M.S., 1917; Med. H.O., P.B.B.H., Jan. 9, 1918-March 1, 1918; Capt., M.C., U.S. Army.

BLAKE, FRANCIS GILMAN

A.B., Dartmouth, 1908; M.D., H.M.S., 1913; Med. H.O., P.B.B.H., July 1, 1913-Nov. 1, 1914; Asst. Res. Phys., P.B.B.H., Nov. 1, 1914-Sept. 1, 1915; Res. Phys., P.B.B.H., Sept. 1, 1915-Oct. 1, 1916; Moseley Travelling

Fellow (Harv.); Asst. Rockefeller Inst. Hosp., Oct. 1916–June 1917; Asst. Prof. of Med., Univ. of Minn., June 1917–July 1919; Visit. Phys., Elliott Mem. Hosp., Univ. of Minn., June 1917–July 1919 (leave of absence Feb. 11, 1918–July 1, 1919); Assoc. in Med., Rockefeller Inst. Hosp., July 1, 1919–July 1, 1920; Assoc. Mem. in Med., Rockefeller Inst. Hosp.

BOEHM, JULIUS BENJAMIN

B.S., St. Louis Univ., 1910; M.D., J.H.M.S., 1914; Surg., H.O., P.B.B.H., Nov. 1, 1914–Nov. 1, 1915 (resigned); Res. Surg., Greenpoint Hosp., Brooklyn, N. Y., Nov. 1, 1915–July 1918; Surg. Service, Walter Reed Hosp.; Surg., Brooklyn, N. Y.

BOOTHBY, WALTER MEREDITH

A.B., Harv., 1902; M.D., H.M.S., 1906; A.M., Harv., 1907; European Clinics for 8 mos., 1907–08; Surg. H.O., B.C.H., 1908–09; Asst. in Anatomy, H.M.S., 1910–14; Asst. in Anaesthesia, Harv. Grad. School of Med., 1912–13; Sheldon Travelling Fellow, Harv. (Oxford Univ., largely); Anaesthetist, B.C.H., 1912; Supervisor of Anaesthesia, P.B.B.H., Dec. 11, 1913–Nov. 14, 1916; Lect. on Anaesthesia & Instr. in Anatomy, H.M.S., 1914–16; Head of Section of Clin. Metabolism, Mayo Clinic, Rochester, Minn., Nov. 1916; Major, M.C., U.S. Army, May 15, 1917–Feb. 1, 1919; Asst. Prof. of Med., Mayo Foundation, Univ. of Minn.; Head of Sect. of Clinical Metabolism, Mayo Clinic.

BRYANT, JOHN

A.B., Harv., 1903; Asst. Res. Surg., Free Hosp. for Women, Brookline, Nov. 1905–June 1906; M.D., H.M.S., 1907; Instr. in Pathol. & Neuropathol., H.M.S., Sept. 1907–June 1908; Surg. House Pupil, M.G.H., Dec. 1908–April 1910; Research in Europe, June 1912–Sept. 1913 & June 1914–Sept. 1914; Asst. in Anatomy, H.M.S., since Sept. 1913; Grad. Asst., M.G.H., Children's O.P.D., Jan. 1915; Neurol., O.P.D., Feb. 1915–June 1916; Asst. to Phys.-in-Chief, Robert B. Brigham Hosp., Jan. 1915–June 1916; Vol. Asst., P.B.B.H., July 1916–Jan. 1917; Assoc. in Med., P.B.B.H., Jan. 1, 1917–Jan. 1, 1918; M.C., U.S. Army, Dec. 12, 1917–May 26, 1919; Med. Asst. in Problems of Convalescence, M.G.H.

BURLINGHAM, LOUIS HERBERT

A.B., Yale, 1902; M.D., J.H.M.S., 1906; House Pupil, M.G.H., 1906–07; Asst. Res. Phys., M.G.H., 1907–12; Asst. Adm., M.G.H., 1912; Ist Asst. Supt., P.B.B.H., Oct. 19, 1912–April 30, 1917; Curator, ibid., May 8, 1913–May 10, 1917; Supt., Barnes Hosp., St. Louis, Mo.; Administrator, St. Louis Children's Hosp.; Lecturer on Hosp. Adm., Washington Univ. Med. School.

*CADBURY, WILLIAM WARDER

A.B., Haverford, 1898; A.M., *ibid.*, 1899; M.D., Univ. of Pa., 1902; Res. Phys., Pa. Hosp., 1903–05; Student, in Vienna, Summer of 1905; Instr. in Pathol. & Pharmacodynamics, Univ. of Pa., 1906–07; Pathol., St. Mary's Hosp., Phila., Pa., 1906–07; Pathol., Henry Phipps Inst. for the Study, Treatment & Prevention of Tuberculosis, 1908–09; Visit. Phys., Free Hosp. for Poor Consumptives, White Haven, Pa., 1908–09; Internist, Canton Hosp., Canton, China; Asst. Res. Phys., P.B.B.H., Nov. 1, 1915–March 1, 1916; College Phys., Canton Christian College, Canton, China.

*CARR, GLADYS LYDIA

M.D., Tufts, 1906; H.O., N.E. Hosp. for Women & Children, 1906–07; Asst. on Maternity Staff, *ibid.*, 1907–08; General Practice, Boston, 1907–08; Private Practice, Lynn, 1908–14; Head of Roentgen & Electrotherapeutic Depts., N. E. Hosp. for Women & Children; *Roentgenologist*, *protempore*, *P.B.B.H.*, *June 1*, 1914–Feb. 1, 1916; Roentgenologist, *ibid.*, Feb. 1, 1916–Oct. 31, 1917; Roentgenologist, American Comm. for Relief in the Near East, Asia Minor.

CARTER, JR., DAVID WENDEL

A.B., Southwestern Univ., 1909; A.M., *ibid.*, 1910; M.D., J.H.M.S., 1914; H.O., Clifton Springs Sanitarium, Summer of 1914; *Med. H.O.*, *P.B.B.H.*, *Jan. 4*, 1915–July 1, 1916; Asst. Res. Phys., J.H.H., Aug. 1916–Sept. 1, 1917; Res. Phys., in charge of Private Wards, J.H.H., 1917–18; 1st Lieut., M.C., U.S. Army, Nov. 23, 1917–May 22, 1919; Phys., Dallas, Texas; Assoc. Prof. of Physical Diagnosis, Baylar Univ. Med. Coll., Dallas; Visit. Phys., Parkland Hosp., Dallas; Assoc. Prof. of Med., Baylar Univ. Med. Coll., Dallas, Texas; Mem. Staff, Texas Baptist Memorial Sanitarium.

Chase, Henry Melville

S.B., Dartmouth, 1897; M.D., H.M.S., 1901; House Pupil, M.G.H., 1901-02; Asst. Surg., Boston Disp., 1906-14; Fellow Am. Coll. of Surg., 1912; Surg., Boston Dispensary; Surg., Berkeley Infirmary; Assoc. in Surg., P.B.B.H., Nov. 17, 1914-July 11, 1919 (resigned).

COBB, STANLEY

A.B., Harv., 1910; M.D., H.M.S., 1914; Surg. H.O., P.B.B.H., July 1, 1914–July 1, 1915; Vol. Lab. of Physiol. Research, J.H.M.S., Nov. 1915–June 1916; Asst. in Physiol., J.H.M.S.; Asst. in Psychiatry, J.H.H., 1916–17; Asst. in Psychiatry & Physiol. of the Nervous System, J.H.M.S.; Asst. Psychiatrist, J.H.H., 1917–18; Assoc. in Psychiatry, J.H.M.S. (on leave of absence); 1st Lieut., M.C., U.S. Army, Aug. 15, 1917–April 23, 1919; Asst. Neurol., M.G.H., 1919–20; Dalton Scholar, M.G.H.; Instr. in Neurol. & Physiol., H.M.S., 1919–20; Asst. Neurol., M.G.H.; Asst. Prof. of Neuropathol., H.M.S.

COOK, WARD HANCE

A.B., Univ. of Kan., 1909; A.M., *ibid.*, 1910; Fellow in Zoölogy, *ibid.*, 1909–10; Instr. in Embryology & Histology, *ibid.*, 1910; M.D., H.M.S., 1914; *Med. H.O.*, *P.B.B.H.*, *July 1*, *1914–July 10*, *1915* (resigned); 2nd Asst. in Pathol., B.C.H., July 10, 1915–July 1, 1916; 1st Asst. in Pathol., B.C.H., July 1, 1916–June 1, 1917; Pathol., Long Island Hosp., Boston, June 1, 1917; Instr. in Pathol., H.M.S., 1917.

COUNCILMAN, WILLIAM THOMAS

M.D., Univ. of Md., 1878; Stud., Univs. of Vienna & Leipzig; Hon. A.M., Harv., 1899; Hon. A.M., J.H.U., 1902; LL.D., Univ. of Md., 1907; LL.D., McGill Univ., 1911; Asst. Prof. in Anatomy, J.H.M.S., 1890–91; Shattuck Prof. of Pathol. Anatomy, H.M.S.; Consulting Pathol., P.B.B.II., March 25, 1912–Aug. 14, 1913; Pathol., P.B.B.II., Aug. 14, 1913–Dec. 1, 1916 (granted leave of absence from Nov. 9, 1916–Dec. 1, 1916; Mem. Dr. Hamilton Rice's Expedition to South America); Fellow Am. Acad., 1895; Mem. Nat. Acad. of Sciences, 1904; Fellow Philosophical Society, Phila., 1918.

- *Crockett, Eugene Anthony
 Acting Consulting Otologist & Laryngologist, P.B.B.H.
- *Curtis, Robert Dudley
 A.B., Harv., 1914; M.D., H.M.S., 1918; Med. H.O., P.B.B.H., July 1,
 1918-July 1, 1919.
- *Dawson, Roger Paul A.B., Holy Cross, 1907; M.D., H.M.S., 1911; Med. H.O., Carney Hosp., Boston, April 1911-Aug. 1912; Med. H.O., P.B.B.H., Nov. 1, 1912-Nov. 1, 1913; Fellow in Med., H.M.S., 1914-15; Phys., Carney Hosp., O.P.D., 1914-15; Asst. Phys., Boston Dispensary, O.P.D.; Asst. Phys., M.G.H., O.P.D.; Asst. in Med., H.M.S.; Assoc. in Med., P.B.B.H., July 1, 1915-Dec. 31, 1916.
- Dean, Jr., Archie Leigh B.S., Cornell, 1913; M.D., *ibid.*, 1917; Surg. H.O., P.B.B.H., May 1917– Feb. 1918; 1st Lieut., M.C., U.S. Army, Feb. 6, 1918–Sept. 12, 1919.
- DEVAN, THOMAS ALAN

 B.S., Rutgers, 1906; M.D., J.H.M.S., 1910; H.O., Presbyterian Hosp.,
 N. Y. City, Jan. 1, 1911–Jan. 1, 1913; 2nd Asst. Supt., P.B.B.H., Aug. 1,
 1913–May 1, 1917; 1st Asst. Supt., P.B.B.H., May 1, 1917–July 1, 1919
 (resigned); (on leave of absence), 1st Lieut., M.C., U.S. Army, Nov. 5,
 1918–Dec. 6, 1918; College Phys. & Prof. of Hygiene, Rutgers College,
 New Brunswick, N. J.
- Donald, Douglas
 B.S., Univ. of Michigan, 1916; M.D., H.M.S., 1918; Med. H.O., P.B.B.H.,
 Feb. 12, 1918-March 1, 1919; Asst. Res. Phys., P.B.B.H., March 1, 1919June 16, 1919; Henry Ford Hosp., Dec. 1919-Nov. 1920; Private Practice,
 Detroit, Michigan.
- Drinker, Cecil Kent B.S., Haverford, 1908; M.D., Univ. of Pa., 1913; Med. H.O., P.B.B.H., March 1, 1914-July 1, 1915; Instr. in Physiol., J.H.M.S., 1915-16; Instr. in Physiol., H.M.S., 1916-18; Res. Phys., P.B.B.H., July 10, 1917-Oct. 15, 1917; Asst. Prof. Physiology, H.M.S., 1918-19; Assoc. Prof., Applied Physiology, H.M.S.
- Drinker, Katherine Rotan A.B., Bryn Mawr, 1910; M.D., Woman's Med. Coll. of Pa., 1914; Asst. Res. Phys., P.B.B.II., July 7, 1917–Sept. 24, 1917.
- *Edwards, Sumner A.B., Bowdoin, 1910; Stud., Hebron Acad., Me., 1910–11; M.D., H.M.S., 1915; Med. II.O., P.B.B.H., Nov. 1, 1915–Jan. 6, 1916 (died Jan. 6, 1916).
- ELIOT, MARTHA MAY
 A.B., Radcliffe, 1913; M.D., J.H.M.S., 1918; Med. H.O., P.B.B.H., June
 15, 1918-July 1, 1919; St. Louis Children's Hosp., Sept. 1, 1919-Sept. 1,
 1920; Phys., Boston, Mass.
- *Fallon, Louis F. M.D., Univ. of Pa., 1916; Surg. H.O., P.B.B.H., July 1, 1916-Nov. 15, 1916.

Fitz, Reginald

A.B., Harv., 1906; M.D., H.M.S., 1909; Med. House Pupil, M.G.H., 1910–11; Vol. Asst. in Pharmacol. & in Med. Clinic, J.H.H., 1911–12; Sr. Med. H.O., P.B.B.H., Nov. 1, 1912–July 1, 1913; Asst. Res. Phys., P.B.B.H., July 1, 1913–Sept. 1, 1915 (granted leave of absence to Dec. 31, 1916); Fellow in Physiol., H.M.S., 1914–15; Asst. Res. Phys., Rockefeller Inst. Hosp., N. Y. City; Major, M.C., U.S. Army, May 1917–April 1919; Assoc. in Med. & Acting Res. Phys., East Med. Service, M.G.H.; Mayo Clinic & Mayo Foundation.

*Fleming, Le Roy Newton

A.B., Miami, 1910; M.D., J.H.M.S., 1914; Asst. in Surg., J.H.U., 1915; Surg. H.O., P.B.B.H., Nov. 1, 1915–March 1, 1916; Special Student, Univ. of Mich., Oct. 1, 1915–Dec. 1, 1916; Surg. Research, Detroit, Michigan.

FORBES, HENRY STONE

A.B., Harv., 1905; Phillipine Islands, 1905–06; Harv. Grad. Sch. of Med., 1906–07; M.D., H.M.S., 1911; Med. H.O., B.C.H., 1911–13; Sr. Med. H.O., P.B.B.II., June 1, 1913–Nov. 1, 1913; Phys. for Men, Infirmary, Univ. of Calif., Berkeley, Calif., March 1914–July 1915; American Red Cross, Serbia, July 1915–Feb. 1916; Asst. Phys., M.G.H., O.P.D.; Lieut. & Capt., M.C., U.S. Army, May 1, 1917–April 29, 1919; Research Work, Cancer Commission, H.M.S.; Lab. & Field Work, Div. Industrial Hygiene, H.M.S.

*Foster, John Hess

B.S., Colby, 1913; M.D., Univ. of Pa., 1917; Med. H.O., P.B.B.H., July 1, 1917-June 15, 1918; 1st Lieut., M.C., U.S. Army; Instr. in Med., "Yale in China" Med. School, Changsha, China.

FREMONT-SMITH, MAURICE

A.B., Harv., 1913; M.D., H.M.S., 1918; Surg. II.O., P.B.B.H., March 1, 1918–Feb. 7, 1919; in charge of hospital at Sivas, Armenia, April 1919–Feb. 1920; Practice of Internal Med., Boston, Mass.

GABE, WILLIAM EDWIN

Stud., 3 yrs., Indiana Univ.; M.D., H.M.S., 1918; Surg. H.O., P.B.B.H., March 1, 1918-March 31, 1919.

GOETSCH, EMIL

S.B., Univ. of Chicago, 1903; Ph.D., *ibid.*, 1906; Fellow Asst. & Assoc. in Anatomy, *ibid.*, 1904–08; Research Asst., Dept. of Exp. Therapeutics, *ibid.*, 1908–09; Rush Med. Coll., 1906–07; M.D., J.H.M.S., 1909; Asst. in Surg., J.H.M.S., 1909–10; Asst. Res. Surg., J.H.H., 1910–12; Res. Surg., P.B.B.H., Sept. 1, 1912–Sept. 1, 1915; Asst. in Surg., H.M.S., 1912–15; Assoc. in Surg., J.H.H., 1915–18; Assoc. Prof. of Surg., J.H.M.S., 1918–19; Prof. of Surg. & Surg.-in-Chief, Long Island Coll. Hosp., Brooklyn.

GOLDEN, Ross

Λ.B., Cornell (Mt. Vernon, Iowa), 1912; M.D., H.M.S., 1916; *Med. II.O.*, *P.B.B.II.*, *July 1*, 1916–*July 18*, 1917; Capt., M.C., U.S. Army, July 18, 1919–April 14, 1920; Major, M.C., U.S. Army, April 14, 1920–April 26, 1920; House Phys., Roentgen. Dept., M.G.H.

GOODALL, HARRY WINFRED

A.B., Dartmouth, 1898; M.D., H.M.S., 1902; House Pupil, M.G.H., 1902-03; House Pupil, Boston Lying-In Hosp., 1903; Phys., Boston Dis-

pensary; Asst. Visit. Phys., N. E. Baptist Hosp.; Assoc. in Med., P.B.B.H., Dec. 12, 1912–Dec. 31, 1917; Instr. in Med., Harv. Grad. School of Med.; Lieut. Col., M.C., U.S. Army, Oct. 20, 1917–March 2, 1919.

GRABFIELD, GUSTAVE PHILIP

A.B., Williams, 1912; M.D., H.M.S., 1915; Teaching Fellow, Dept. of Pharmacol., H.M.S., 1915–16; *Med. H.O.*, *P.B.B.H.*, *March 1*, 1916–June 17, 1917; Capt., M.C., U.S. Army, April 1917–August 1919; Asst. in Roentgenology, Univ. of Mich. Hosp., 1919–20; Instr. in Pharmacology, H.M.S.

GRAY, HORACE

A.B., Harv., 1909; M.D., H.M.S., 1914; *Med. H.O.*, *P.B.B.H.*, *Nov. 1*, 1914–March 1, 1916; Phys., Boston, Mass.; 1st Lieut., M.C., U.S. Army, Nov. 1917–August 1919.

*GREY, ERNEST

A.B., Univ. of Wis., 1907; Asst. in Anatomy, *ibid.*, 1907–08; Stud. in Med., Univ. of Wis. Med. School, 1907–08; M.D., J.H.M.S., 1911; Res. H.O., J.H.H., 1911–12; Surg. H.O., P.B.B.H., Nov. 1, 1912–Feb. 12, 1914; Asst. Res. Surg., P.B.B.H., Feb. 12, 1914–Sept. 1, 1916; Asst. in Surg., H.M.S., 1915–16; Instr. in Surg., J.H.M.S.; died Oct. 12, 1918.

HALE, WORTH

A.B., Univ. of Michigan, 1908; M.D., ibid., 1904; Assoc. in Med., P.B.B.H., Nov. 1, 1917-Dec. 31, 1918.

HALLER, DAVID ALEXANDER

A.B., Hampden-Sidney, 1908; M.D., Columbia Univ., Coll. of Phys. & Surg., 1913; Med. H.O., P.B.B.H., Nov. 1, 1913-March 1, 1915; Asst. Res. Phys., ibid., March 1, 1915-Oct. 1, 1916; Res. Phys., ibid., Oct. 1, 1916-June 6, 1917; Major, M.C., U.S. Army, June 1917-Feb. 1919; Internist for the Rochester Clinic, Rochester, N. Y.; Junior Attend. Phys., Hahnemann Hosp.

HARVEY, SAMUEL CLARK

Ph.B., Yale, 1907; M.D., Yale Med. School, 1911; Alonzo Clark Fellow, Columbia Univ., 1911–12; Instr. in Pathol., *ibid.*, 1912–13; Asst. Res. Phys., Loomis Sanitorium, Loomis, N. Y., 1913–14; Surg. H.O., P.B.B.H., Nov. 1, 1914–Nov. 1, 1915 (resigned); Arthur Tracy Cabot Fellow in Charge of Lab. of Surg. Research, H.M.S., Nov. 1, 1915–Nov. 1, 1916; Asst. Res. Surg., P.B.B.H., Nov. 1, 1916–May 7, 1917; Major, M.C., U.S. Army, May 5, 1917–April 30, 1919; Res. Surg., New Haven Hosp.; Instr. in Surg., Yale Univ. Med. School, July 1, 1919–July 1, 1920; Asst. Prof. of Surg., *ibid.*; Attend. Surg., New Haven Hosp.; Attend. Surg., New Haven Dispensary.

HATCH, FLOYD FROST

A.B., Univ. of Utah, 1912; M.D., H.M.S., 1914; Med. H.O., P.B.B.H., March 1, 1914–Jan. 4, 1915 (granted leave of absence from Jan. 4, 1915 to Feb. 28, 1915); Surg. House Pupil, M.G.H., Jan. 4, 1915–Oct. 31, 1916; House Surg., M.G.H., Oct. 31, 1916–Feb. 1, 1917; Private Practice of Surgery, Salt Lake City, Utah; Surg. to G. U. Dept., Salt Lake County Hosp., March 1, 1917–Jan. 1918; Surg. to G. U. Dept., L.D.S. Hosp., Salt Lake City, Utah; 1st Lieut., M.C., U.S. Army, July 1918–August 1919.

*H'Doubler, Francis Todd

B.A., Univ. of Wis., 1907; M.A., *ibid.*, 1908; Ph.D., *ibid.*, 1910; Stud., Univ. of Wis. Med. School, 1 yr.; Stud., Rush Med. School & Univ. of Philippines, 1 yr.; M.D., H.M.S., 1915; H.O., Augustana Hosp., Chicago, June 1915–Jan. 1916; *Med. H.O.*, *P.B.B.H.*, *Jan. 11*, 1916–March 1, 1917; H.O., Augustana Hosp., April 1917–Jan. 1, 1918.

HERRICK, THEODORE POMEROY

A.B., Yale, 1915; M.D., H.M.S., 1919; *Med. H.O.*, *P.B.B.H.*, *Dec. 26*, 1918–Jan. 1, 1920; Med. H.O., Children's Hosp., Boston, Jan. 1, 1920–Oct. 1, 1920; H.O., Infant's Hosp., Boston.

HERRMANN, GEORGE R.

B.S., Univ. of Michigan, 1916; M.D., & M.S., *ibid.*, 1918; *Med. H.O.*, *P.B.B.H.*, *Oct. 1*, *1918–Oct. 1*, *1919*; Asst. Res. Phys., Barnes Hosp., Oct. 1, 1919–July 1, 1920; Res. Phys., *ibid.*; Asst. in Med., Wash. Univ. School of Med., St. Louis, Mo.

Hodgson, John Sprague

Ph.B., Brown, 1911; M.D., H.M.S., 1917; Surg. House Pupil, M.G.H., Feb. 1, 1915-Aug. 1, 1916; Res. Surg., M.G.H., Sept. 15, 1916-Nov. 15, 1916; Surg. H.O., P.B.B.H., Nov. 1, 1916-March 1, 1917; Asst. Res. Surg., ibid., March 1, 1917-June 22, 1917; 1st Lieut., M.C., U.S. Army, June 23, 1917-Jan. 28, 1919; 1st Lieut., A.R.C., Typhus work in Macedonia, Feb. 1, 1919-June 1, 1919; Res. Surg., M.G.H., Jan. 1920-Oct. 1920.

HOUSTON, JR., DAVID WALKER

A.B., Princeton, 1912; M.D., H.M.S., 1916; Surg. H.O., P.B.B.H., July 1, 1916–Nov. 1, 1917; Asst. Res. Surg., ibid., Nov. 1, 1917–Feb. 8, 1918; 1st Lieut., M.C., U.S. Army, Jan. 2, 1918–May 3, 1919; Surg. Staff, Samaritan Hosp., Troy, New York.

HOWARD, HERBERT BURR

A.B., Harv., 1881; M.D., H.M.S., 1884; Asst. Phys., State Infirmary, Tewksbury, Mass., 1884–85; in Practice at Idaho Springs, Colo., 1885–87; Asst. Phys., State Infirmary, 1887–91; Supt., *ibid.*, 1891–97; Res. Phys., M.G.H., 1897–1908; Supt., P.B.B.H., May 1, 1908–May 1, 1919 (retired — age limit); Mem. Mass. State Bd. of Insanity, 1898–1913 (Chairman, 1908–13); Pres. Am. Hosp. Ass'n., 1909–10; Trustee, State Colony for the Insane, Gardner, Mass.

HURWITZ, SAMUEL HAYMANN

A.B., Harv., 1907; A.M., *ibid.*, 1908; Special Student, Univ. of Strassburg, Germany, 1909–10; Special Student, Inst. of Infectious Diseases, Berlin, Germany, Summer of 1911; M.D., J.H.M.S., 1912; Res. H.O., J.H.H., 1912–13; Surg. H.O., P.B.B.H., Nov. 1, 1913–March 1, 1915; Instr. in Research Med., Geo. Wms. Hooper Foundation for Med. Research, Univ. of Cal., San Francisco, Cal.; Asst. Clinical Prof. of Med., Univ. of Cal., San Francisco.

JACK, WILLIAM DAVID

A.B., Creighton, 1908; Grad. Stud., Univ. of Chicago, 1909–10; M.D., J.H.M.S., 1914; Surg. H.O., P.B.B.H., July 1, 1914–Nov. 1, 1915; Capt. & Asst. Surg., 2nd Harv. Unit, B.E.F., France, Dec. 1915–June 1916; Asst.

Res. Urologist, J.H.H., 1916–17; Capt., M.C., U.S. Army & Consult. Urologist, A.E.F., 1917–1919; Asst. Res. Surg. & Res. Urologist, J.H.H., 1919–20.

*Janney, James Craik

A.B., Harv., 1911; M.D., H.M.S., 1915; Surg. H.O., P.B.B.H., July 1, 1915-Nov. 1, 1916; Asst. Surg., Free Hosp. for Women, O.P.D., Brookline; Capt., M.C., U.S. Army.

JONES, MERRITT LACOUNT

S.B., Univ. of Wis., 1912; M.D., H.M.S., 1915; Surg. H.O., P.B.B.H., July 1, 1915-Nov. 1, 1916; Asst. Res. Surg., P.B.B.H., Nov. 1, 1916-March 1, 1917; Capt., M.C., U.S. Army, Aug. 1917-July 1919.

KEYSER, LINWOOD DICKENS

B.A., Virginia, 1914; M.D., J.H.M.S., 1918; H.O., J.H.H., 1918-19; Asst. Res. Surg., P.B.B.H., July 1, 1919-Nov. 1, 1919; Res. Surg., N. Y. Post Grad. Hosp., N. Y. City, Jan. 1920-May 1920; Fellow, Mayo Foundation, Rochester, Minn.

*KING, WILLIAM ROBERT

B.S., Univ. of Minn., 1913; M.D., H.M.S., 1917; Med. H.O., P.B.B.H., July 1, 1917-Feb. 1, 1918; Asst. Res. Phys., ibid., Feb. 1, 1918-Oct. 24, 1918 (resigned); Private Practice, Minn.

*Kirkwood, Allan Stewart

M.D., Univ. & Bellevue Hosp. Med. Coll., N. Y., 1913; Assoc. in Med., P.B.B.H., Nov. 1, 1917-Dec. 31, 1917; Major, M.C., U.S. Army.

KOEFOD, HILMAR OLAF

B.S., Beloit, 1911; M.D., H.M.S., 1916; Moseley Travelling Fellowship, Harv., in Europe, Summer of 1916; Med. H.O., P.B.B.H., Nov. 1, 1916–Nov. 1, 1917; 1st Lieut., M.C., U.S. Army, Oct. 1917–May 1918; Chief of Clinic at Mem. Lab. & Clinic, Santa Barbara, Calif.; Asst. in Med., Med. School, Univ. of Calif.; Asst. to Prof. H. C. Moffit in his private work; Chief of Med. Dept., Santa Barbara Clinic; Attend. Phys., Cottage Hosp., Santa Barbara, Calif.

KREUTZMANN, HENRY ADOLPH ROBERT

M.D., Univ. of Pa., 1916; Surg. H.O., P.B.B.H., March 1, 1917-Feb. 4, 1918; Lieut., M.C., U.S. Army; Private Practice, San Francisco, Calif.

LADD, WILLIAM SARGENT

B.S., Amherst, 1910; M.D., Columbia Univ., Coll. of Phys. & Surg., 1915; *Med. H.O. P.B.B.H.*, *Nov. 1*, 1915–March 1, 1917; Asst. Phys., Presbyterian Hosp., N. Y. City; Instr. in Med., Coll. of Phys. & Surg., Columbia Univ., N. Y., 1918–19; 1st Lieut., M.C., U.S. Army; Asst. Phys., Presbyterian Hosp., N. Y. City; Asst. in Med., J.H.H., Baltimore, Md., 1920–21; Instr. in Med., J.H.U.

*Lamson, Paul Dudley

A.B., Harv., 1905; M.D., H.M.S., 1911; Med. House Pupil, M.G.H., March 1909-Aug. 1910; Lect. Asst. in Pharm., Univ. of Wurzburg, Germany, 1912-13; Sheldon Travelling Fellowship, 1911-13; Asst. Res. Phys., P.B.B.H., Oct. 1, 1913-Oct. 15, 1914; Asst. in Exp. Therapeutics, J.H.M.S., 1914-15; Assoc. in Exp. Therapeutics, J.H.M.S.

LEHMAN, EDWIN PARTRIDGE

A.B., Williams, 1910; M.D., H.M.S., 1914; Surg. H.O., P.B.B.H., July 1, 1914–July 1, 1915; Asst. Res. Surg., Barnes Hosp., St. Louis, Mo., Sept. 1, 1915–Sept. 1, 1916; Asst. in Surg., Washington Univ. Med. School, 1916–20; 1st Lieut., M.C., U.S. Army, May 19, 1917–May 2, 1919; Res. Surg., Barnes Hosp., St. Louis, 1919–20; Visit. Surg., St. Louis City Hosp. No. 2; Surg. to Out-Patients, Washington Univ. Dispensary; Instr. in Surg., Washington Univ. Med. School.

LIEB, CLARENCE WILLIAM

A.B., Colorado, 1908; A.M., *ibid.*, 1909; M.D., H.M.S., 1914; *Pathol. H.O.*, *P.B.B.H.*, *April 1*, 1914–June 6, 1914 (resigned); Med. Director "The Glen Springs," Watkins, N. Y., 1914–17 (resigned); Asst., Cardiac Clinic, N. Y. Hosp.; Asst. Attend., St. Bartholomew's Hosp., N. Y. City.

*Lyle, Eveline Burton

B.A., Mt. Holyoke Coll., 1906; M.D., Tufts Coll. Med. School, 1913; Acting Assoc. in Med., P.B.B.H., Nov. 1, 1917-Dec. 31, 1917; Visit. Phys. & Obstetrician, N. E. Hosp. for Women & Children.

*Marlow, Searle Bisset

A.B., Harv., 1912; Stud., H.M.S., 1 yr.; M.D., Syracuse Univ. Med. School, 1916; Pathol. H.O., P.B.B.H., July 1, 1916-July 11, 1917.

*MARVIN, FRANK WILLIAM

A.B., Harv., 1910; M.D., H.M.S., 1914; House Pupil, M.G.H., 1914–15; Surg. H.O., P.B.B.H., Nov. 1, 1915–March 1, 1916; Phys., Boston, Mass.; Asst. Surg., M.G.H., O.P.D.; Asst. in Anatomy, H.M.S.

MARVIN, HAROLD MYERS

A.B., Davidson College, 1914; M.D., H.M.S., 1918; Med. H.O., P.B.B.H., Feb. 13, 1918–Feb. 9, 1919; District Phys., Alexandropol, Armenia, Comm. to Near East, Feb. 16, 1919–March 20, 1920; Asst. in Med., H.M.S.; Asst. in Med., M.G.H.

McCann, William Sharp

A.B., Ohio State Univ., 1911; M.D., Cornell Univ. Med. Coll., 1915; Asst. Res. Phys., General Memorial Hosp., N. Y. City, June 1, 1915–Oct. 1, 1915; Surg. H.O., P.B.B.H., Nov. 1, 1915–Nov. 1, 1916 (resigned); Arthur Tracy Cabot Fellow in charge of Lab. of Surg. Research, H.M.S.; Capt., M.C., U.S. Army, Sept. 1919; Instr. in Med., Cornell Univ.; Research Fellow, Russell Sage Inst. of Pathol.; Adjunct Visit. Phys., Bellevue Hosp., N. Y. City.

*McCarthy, Patrick Thomas

B.S., Univ. of Chicago, 1914; M.D., Rush Med. Coll. 1917; Surg. H.O., P.B.B.H., Dec. 15, 1917-Oct. 1, 1918; Asst. Res. Surg., P.B.B.H., Oct. 1, 1918-Feb. 9, 1919; Relief Comm. Near East, Armenia.

McCarty, Elba Denton

M.D., Univ. of Mich., 1903; Interne, 2 yrs., St. Mary's Hosp., Saginaw, E.S., Mich.; Gen. Practice, Merrill, Mich., 1905-09, Priest River, Idaho, 1909-17; Roentgenologist, P.B.B.H., July 1, 1918-Oct. 14, 1919.

McQuesten, Philip

A.B., Dartmouth, 1911; M.D., H.M.S., 1915; Stud., B.C.H. (Pathol. Lab.), 1915–16; Surg. H.O., P.B.B.H., March 1, 1916–July 1, 1917; Asst. Res. Surg., ibid., July 1, 1917–Aug. 17, 1917.

MILLET, JOHN ALFRED PARSONS

A.B., Harv., 1910; M.D., H.M.S., 1914; Med. H.O., P.B.B.H., Nov. 1, 1914-March 1, 1916; Internist, N. Y. State Inst. for the Study of Malignant Disease, Buffalo (resigned Jan. 1, 1920); Capt., M.C., U.S. Army, July 1917-Aug. 1919; Asst. Attend. Phys., Buffalo General Hosp.; Assoc. Phys. to the Board of Hospitals and Dispensaries; Instr. in Med., Buffalo Univ. Med. School; Chief Res. Phys., Dept. of Hospitals & Dispensaries.

*Montgomery, James Blaine

A.B., Dartmouth, 1911; M.D., H.M.S., 1915; Surg. H.O., P.B.B.H., Nov. 1, 1915–March 1, 1917; House Surg., Mass. Char. Eye & Ear Infirmary, March 1, 1917–July 16, 1917; Grad., Army Med. School, 1917; 1st Lieut., M.C., U.S. Army.

*Morris, Jr., Samuel Leslie

B.S., Davidson (N.C.), 1911; M.D., H.M.S., 1916; Surg., H.O., P.B.B.H., Nov. 1, 1916-Nov. 1, 1917; 1st Lieut., M.C., U.S. Army; First Asst. House Surg., St. Louis Southwestern Hosp., Sept. 1, 1919-Dec. 15, 1919; Chief House Surg., ibid.

Morton, John Jamieson

A.B., Amherst, 1907; M.D., J.H.M.S., 1913; Surg. H.O., P.B.B.H., March I, 1913-July I, 1914; Fellow in Pathol., Rockefeller Inst., N. Y. City, July 1, 1914-Sept. 1, 1915; House Surg., M.G.H., Nov. 1, 1915-Nov. 1, 1916; Asst. Res. Phys., Rockefeller Inst. Hosp., N. Y. City, Nov. 1916-May 1917; Major, M.C., U.S. Army, May 1917-April 1919; Practice, Orthopedic Surg., Boston, Mass.; Grad. Asst., O.P.D., Children's Hosp., Boston; Asst. Orthopedic Surg., Children's Hosp., Boston.

O'Meara, John William

A.B., Holy Cross, 1912; M.D., H.M.S., 1918; Surg. H.O., P.B.B.H., Jan. 7, 1918–Jan. 7, 1919; Orthopedic H.O., Children's Hosp., Boston, Jan. 1919–July 1919; Comm. for Relief in Near East, in charge of Surg. Wards, American Hosp., Samsoun, Turkey in Asia, July 1919–Sept. 1920; Asst. Orthopedic Surg., M.G.H., O.P.D.; Practice, Worcester, Mass.

OPPENHEIMER, ELLA

A.B., Bryn Mawr College, 1914; M.D., J.H.M.S., 1918; Med. H.O., P.B.B.H., Sept. 1, 1918-June 11, 1919.

*PARKER, JR., FREDERIC

A.B., Harv., 1913; M.D., H.M.S., 1916; Med. H.O., P.B.B.H., March 1, 1917-April 1, 1917.

PENFIELD, WILDER GRAVES

Litt.B., Princeton, 1913; B.A., Oxford, 1916; M.A. & B.Sc., *ibid.*, 1920; M.D., J.H.M.S., 1918; Surg. H.O., P.B.B.H., Aug. 15, 1918-Sept. 20, 1919; Beit Mem. Research Fellow, England.

PETTIT, ROSWELL TALMADGE

S.B., Univ. of Chicago, 1908; M.D., Rush Med. Coll., 1913; Med. H.O., P.B.B.H., March 1, 1914-July 1, 1915; Asst. Med. Director, Ottawa Tuber-

culosis Colony, Ottawa, Ill.; Phys., Illinois Valley Hosp., Ottawa, Ill.; Capt., M.C., U.S. Army; Acting Asst. Surg., U.S.P.H.S.; Instr. in Phys. Diagnosis, School for U.S.P.H.S. Examiners.

*RAND, CARL WHEELER

A.B., Williams, 1908; A.M., *ibid.*, 1909; M.D., J.H.M.S., 1912; Res. H.O., J.H.H., 1912–13; Asst. Res. Surg., P.B.B.H., Oct. 1, 1913–Nov. 1, 1914; House Surg., Mercy Hosp., Chicago, Ill., Dec. 1, 1914–Nov. 1, 1915; Capt., M.C., U.S. Army; Surg., Los Angeles, Cal.

RAPPORT, DAVID

A.B., Harv., 1912; M.D., H.M.S., 1916; (Moseley Travelling Fellowship, June 1916–March 1917); Med. H.O., P.B.B.H., March 1, 1917–June 17, 1917; Lieut., M.C., U.S. Army, June 1917–March 1919; Austin Teaching Fellow in Physiology, H.M.S., Sept. 1919–Sept. 1920; Instr. in Physiology, H.M.S.

*RHEA, LAWRENCE JOSEPH

B.S., Univ. of Texas, 1901; M.D., J.H.M.S., 1905; H.O., in Pathol., B.C.H., 1906–07; 2nd Asst. in Pathol., *ibid.*, Jan. 1907–Aug. 1907; 1st Asst. in Pathol., *ibid.*, Aug. 1907–Sept. 1908; Asst. Visit. Pathol., *ibid.*, 1908–09; Asst. in Pathol., H.M.S., 1908–09; Instr. in Pathol., *ibid.*, 1909–10; Asst. Pathol., B.C.H., 1909–10; Director of Pathol. Lab. & Pathol., Montreal Gen'l Hosp., 1910–12; Lect. in Pathol., McGill Univ., 1910–11; Asst. Prof. of Pathol., *ibid.*, 1911–12; Res. Pathol., P.B.B.H., July 1, 1912–Oct. 1, 1913; Asst. Prof. of Pathol., H.M.S., 1912–13; Assoc. Prof. of Pathol., McGill Univ.; Director of Pathol. Lab., Montreal Gen'l Hosp.; Major, Canadian Army Med. Corps.

RICHARDSON, HENRY BARBER

A.B., Harv., 1910; M.D., H.M.S., 1914; *Med. H.O.*, *P.B.B.H.*, *March 1*, 1915–July 1, 1916; Asst. in Med., J.H.M.S.; Asst. Disp. Phys., J.H.H.; 1st Lieut., M.C., U.S. Army, May 17, 1918–June 17, 1919; Instr. in Med., Coll. of Phys. & Surg., Columbia Univ., N. Y. City.

ROOT, HOWARD F.

A.B., Harv., 1913; M.D., H.M.S., 1919; Med. H.O., P.B.B.H., Feb. 13, 1919-Jan. 1, 1920; Clin. Lab., J.H.H., Jan. 1, 1920-Sept. 1, 1920.

SAEGER, ERNEST TIRRILL

B.S., Dartmouth, 1914; M.D., H.M.S., 1917; Surg. H.O., P.B.B.H., July 1, 1917-Aug. 1, 1918.

*Simon, Hilda Amanda

M.D., Cooper, 1905; 3rd Asst. Supt., P.B.B.H., Oct. 5, 1917-March 1, 1919 (resigned); Supt., Lynn Hosp., Lynn, Mass.

Sisson, Warren Richards

A.B., Colgate, 1906; Stud. of Med., Freiburg, Germany (Summer semester), 1910; Stud., Univ. of Munchen (Winter semester), 1910–11; Stud. Univ. of Heidelberg (Summer semester), 1911; M.D., J.H.M.S., 1912; House Pupil, M.G.H. (Children's Med. Ward), July 1912–Jan. 1913; Med. H.O., P.B.B.H., March 1, 1913–March 1, 1914; Res. Pathol., P.B.B.H., March 1, 1914–April 1915; Instr. in Pathol., H.M.S., 1914–15; H.O., B.C.H., (So. Dept.), Summer of 1915; Sr. H.O., Boston Floating Hosp., July 1, 1915–Sept. 15, 1915; Instr. in Pediatrics, J.H.M.S.; Asst. in Pediatrics, H.M.S.; Visit. Phys., M.G.H.

*Smillie Wilson George

A.B., Colorado, 1908; M.D., H.M.S., 1912; Med. H.O., P.B.B.H., Nov. 1, 1912-March 1, 1914; Asst. Res. Phys., P.B.B.H., March 1, 1914-Sept. 1, 1914; Asst. Instr., Dept. of Preventive Med., H.M.S., 1914-16; Research Fellow, Rockefeller Inst., N. Y. City, 1916-17; International Health Board of Rockefeller Foundation, 1917; loaned by the board as Asst. Prof. Hygiene de Faculdade de Medicina, Sao Paulo, Brazil, 1918-20; Director. Institute Hygiene; Prof. of Hygiene, Faculdade de Medicina e Cirurgia, Sao Paulo, Brazil.

SMITH-PETERSON, MARIUS NYGAARD

B.S., Univ. of Wis., 1910; Univ. of Wis. Med. School, 1910–12; M.D., H.M.S., 1914; Surg. H.O., P.B.B.H., July 1, 1914–Nov. 1, 1915; Res. Surg., Harv. Unit. Am. Ambulance Hosp., Paris, France, April–July 1918; House Pupil, M.G.H. (Orthopedic Service), 1916; Private Practice, Boston, Mass.; Asst. Visit. Surg., M.G.H., O.P.D., Orthopedic Dept.

*Smith, Judson Arthur

A.B., Harv., 1915; M.D., H.M.S., 1918; Med. H.O., P.B.B.H., Feb. 14, 1918-Jan. 30, 1919.

SPILLMAN, RAMSAY

A.B., Cornell, 1914; M.D., Cornell Univ. Med. Coll., 1917; Surg. H.O., P.B.B.H., July 1, 1917-March 1, 1918; Lieut. (j.g.), U.S.N.R.F.; H.O., Columbia Hosp., Washington, D.C., April 1, 1918-April 1, 1919.

*Stevens, Franklin Augustus

B.S., Univ. of Iowa, 1913; M.D., ibid., 1915; Asst. Res. Phys., P.B.B.H., July 21, 1917-Jan. 1, 1918; M.C., U,S. Army.

STEWART, STEELE FULLER

B.S., Westminster, Pa., 1912; M.D., Univ. of Pa., 1918; Surg. H.O., P.B.B.H., June 1, 1918–July 1, 1919; Orthopedic Serv., Children's Hosp., Boston, May-Nov. 1920; Orthopedic Serv., M.G.H.

STODDARD, JAMES LEAVITT

A.B., Harv., 1910; M.D., H.M.S., 1914; Pathol., H.O., P.B.B.H., July 1, 1914-July 1, 1915; Act. Res. Pathol., P.B.B.H., July 1, 1915-Sept. 1, 1915; Research Fellow in Pathol., H.M.S.; Major, M.C., U.S. Army, April 24, 1917-May 17, 1919; Lect. in Biochemistry, Smith College.

TAFT, ANNIE ELZINA

M.D., Tufts, 1907; Res. Pathol., P.B.B.H., Nov. 5, 1917-Jan. 31, 1918.

TAFT, ROGER BROWNE

D.M.D., Harv. Dental School, 1908; Asst. in Oral Surg., *ibid.*, 1910; Instr. in Oral Surg., *ibid.*, Feb. 1, 1919; in Practice, Boston; *Dental Surg.*, *P.B.B.H.*, *Jan.* 13, 1916–Feb. 13, 1919; Instr. in Operative Dent., Harv. Dental School.

*THAXTER, LANGDON THOM

A.B., Williams, 1911; M.D., H.M.S., 1915; Med. House Pupil, M.G.H., July 1, 1915-Sept. 1, 1916; Surg. H.O., P.B.B.H., Nov. 14, 1916-July 1917; Capt., M.C., U.S. Army; Private Practice (Orthopedic Surgery), Portland, Maine.

THOMPSON, CHARLES BAKER

A.B., Haverford, 1909; M.D., J.H.M.S., 1913; Med. H.O., P.B.B.H., Nov. 1, 1913-Nov. 1, 1914; 2nd Asst. Res. Phipps Psychiatric Clinic, J.H.H., 1914-15; 1st Asst. Res., ibid., 1915-16; Examining Psychiatrist & Executive Sec'y, Mental Hygiene Soc. of Md.; Asst. Dispensary Psychiatrist, Phipps Psychiatric Clinic, J.H.H.; Psychiatrist, Hebrew Hosp. Dispensary.

TOWNE, EDWARD BANCROFT

A.B., Harv., 1906 (1907); M.D., H.M.S., 1913; Surg. H.O., P.B.B.H., July 1, 1913-Nov. 1, 1914; Asst. Res. Surg., P.B.B.H., Nov. 1, 1914-Nov. 1, 1915; Surg., 2nd Harv. Unit, B.E.F., France, Dec. 1915-April 1916; Vol. Asst. in Exp. Bacteriol., Mayo Foundation, Rochester, Minn., June-Sept., 1916; Fellow pro tempore, Mayo Foundation, Sept. 1916-Jan. 1917; Asst. Res. Surg., P.B.B.H., Sept. 1, 1916-May 7, 1917; Major, M.C., U.S. Army, May 1917-April 1919; Instr. in Surg., Med. Dept., Leland Stanford Junior Univ., San Francisco.

*TRANTER, CHARLES LEE

B.S., Univ. of Calif., 1911; M.D., Univ. of Calif. Med. School, 1913; Med. & Surg. H.O., Univ. of Calif. Hosp., 1913–14; Asst. Univ. of Calif. Hosp. (Nerve O.P.D.), 1914–15; Asst. in Neurol., Univ. of Calif. Med. School, 1915; Asst. Res. Surg., P.B.B.H., Jan. 8, 1916–Jan. 1, 1917; Asst. in Neurol., Univ. of Calif. Med. School, 1917; Capt., M.C., U.S. Army.

*Turner, Ralph Waldo

M.D., Albany Med. School, 1917; Surg., H.O., P.B.B.H., Dec. 23, 1917-May 2, 1918; Lieut., M.C., U.S. Army (deceased).

VAIL, HARRIS HOLMES

A.B., Yale, 1912; M.D., H.M.S., 1916; Surg. H.O., P.B.B.H., March 1, 1916-May 3, 1917; Lieut., M.C., U.S. Navy, May 3, 1917-Oct. 20, 1919; Vol. Asst. P.B.B.H., Surg. Serv., Jan. 5, 1920-April 10, 1920; H.O. Aural, Mass. Char. Eye & Ear Infirmary.

*Van Gorder, George Wilson

A.B., Williams, 1911; M.D., H.M.S., 1915; Surg. H.O., P.B.B.H., March 1, 1915-July 1, 1916; House Surg., St. Anthony Hosp., Labrador, July 1, 1916-Oct. 1, 1916; Med. House Pupil, M.G.H., Oct. 1, 1916-Jan. 1, 1917; House Surg., Free Hosp. for Women, Brookline; Capt., M.C., U.S. Army; Assoc. in Surg., Peking Union Med. Coll., Peking, China.

VAUGHAN, WARREN TAYLOR

A.B., Univ. of Mich., 1913; M.D., Univ. of Mich. Med. School, 1916; Med. H.O., P.B.B.H., July 1, 1916–Nov. 7, 1917; 1st Lieut. to Lieut. Col., M.C., U.S. Army, Nov. 7, 1917–July 27, 1919; Asst. in Preventive Med. & Hygiene, H.M.S., Sept. 1919–Oct. 1920; Attend. Phys., St. Elizabeth's Hosp., Richmond, Va.; Assoc. Editor, Jour. Lab. & Clin. Med.

VIETS, JR., HENRY ROUSE

B.S., Dartmouth, 1912; M.D., H.M.S., 1916; Vol. Asst., Med. Service, P.B.B.H., July 13, 1915-July 17, 1915, Aug. 14-Aug. 23, 1915, Sept. 22-Sept. 24, 1915; Surg. H.O., P.B.B.H., March 1, 1917-Aug. 16, 1917; Capt., M.C., U.S. Army, July 10, 1917-Aug. 22, 1919.

WALKER, CLIFFORD BLACK

S.B., Univ. of Calif., 1906; Stud., Univ. of Calif. Med. School, 1907–10; M.D., J.H.M.S., 1911; M.A., J.H.U., 1912; Asst. to Dr. Cushing, 1911–12; Sr. Ophthal. House Surg., Mass. Char. Eye & Ear Infirmary, Boston, 1913; Sr. Aural House Surg., *ibid.*, 1914; Assoc. in Surg., P.B.B.H., March 1, 1915–April 25, 1918; Asst. in Ophthal., H.M.S.

WATKINS, S. SHELTON

A.B., Centre Coll., of Ky., 1908; A.M., *ibid.*, 1909; M.D., J.H.M.S., 1914; Med. & Surg., H.O., Church Home & Infirmary, Baltimore, Jan. 1914–April 1914; 3rd Asst. Supt., P.B.B.H., May 1, 1914–Jan. 15, 1915; Asst. in Clin. Laryngology, J.H.M.S.; Asst. Disp. Laryngologist, J.H.H.; Asst. Res. Surg., *ibid.*; Member of Dr. L. F. Barker's Staff at 1035 No. Calvert St., Baltimore, Md.; Lieut., M.C., U.S. Navy, Dec. 13, 1917–June 6, 1919; Practice, Louisville, Ky.

WEGEFARTH, PAUL

A.B., J.H.U., 1908; Stud. of Med., Strassburg & Berlin, Germany, 1909–11; M.D., J.H.M.S., 1912; Surg. H.O., P.B.B.H., Nov. 1, 1912–March 1, 1914; Asst. Res. Phys., Church Home & Infirmary, Baltimore, 1914; Phys., San Diego, Calif.

WEISMAN, PAUL GERHARDT

B.S., Univ. of Mich., 1911; M.D., Univ. of Mich. Med. School, 1913; H.O., Providence City Hosp. (Contagious Wards), Jan.-April 1914; H.O., R. I. Hosp., April 1914-April 1916; Asst. Res. Phys., P.B.B.H., April 1, 1916-Aug. 1, 1916; Asst. Res., Union Protestant Infirmary, Baltimore, May 1917-Dec. 1917; Res., ibid., Dec. 1917-Aug. 1918; Lieut., M.C., U.S. Army, Sept. 1918-Dec. 30, 1918; General Practice, Colfax, Washington.

WELBOURN, MARSHALL AGNEW

B.S., Univ. of Mich., 1913; M.D., Univ. of Mich. Med. School, 1915; Assoc. in Med., P.B.B.H., July 1, 1915-March 1, 1916; Med. H.O., P.B.B.H., March 1, 1916-July 1, 1917; Capt., M.C., U.S. Army, April 9, 1917- Aug. 15, 1919; Instr. in Int. Med., Univ. of Mich. Med. School, Aug. 15, 1919-July 1, 1920; Private Practice of Int. Med., Hollywood, Cal.

Wells, Ward Stanley

S.B., Grinnell, 1909; M.D., H.M.S., 1916; Assoc. in Med., P.B.B.H., July 1, 1916-April 8, 1917; Med. H.O., P.B.B.H., April 8, 1917-July 18, 1917; Major, M.C., U.S. Army, Letterman General Hosp.; Presidio of San Francisco, Calif.

WENTWORTH, JOHN ALEXANDER

A.B., Bowdoin, 1909; M.D., H.M.S., 1913; H.O., Hartford Hosp., Hartford, Conn., Sept. 1, 1913-May 15, 1915; Sr. Med. H.O., P.B.B.H., July 1, 1915-Nov. 1, 1915; Alumni Asst., Clin. Pathol., H.M.S.; Asst. Harv., Infantile Paralysis Comm., Fall, 1916; Asst. Res. Phys., P.B.B.H., Nov. 1, 1915-August 1, 1917; Assoc. Phys., Clifton Springs Sanitarium, N. Y., Aug. 1, 1917-March 23, 1918; 1st Lieut., M.C., U.S. Army, March 1918-July 1919; Phys., Clifton Springs Sanitarium, N. Y.

*WHITNEY, RAYMOND CYRUS

B.S., Middlebury, 1914; M.D., H.M.S., 1918; Surg. H.O., P.B.B.H., Jan. 10, 1918–Oct. 28, 1918; American Relief Comm., Near East, Caesarea, Turkey in Asia, American Hosp.

Woods, Alan Churchill

A.B., J.H.U., 1910; M.D., J.H.M.S., 1914; Med. H.O., P.B.B.H., July 1, 1914-Nov. 1, 1915; Fellow & Assoc. in Exp. Med. & Asst. in Ophthal., Univ. of Pa. Med. School, Phila.; Major, M.C., U.S. Army, Aug. 1917-April 1919; Instr. in Ophthal., J.H.M.S.

WOODWARD, HARRY WHITING

A.B., Bowdoin, 1910; M.D., H.M.S., 1915; Surg. H.O., P.B.B.H., March 1, 1915–July 1, 1916; H.O., Boston Lying-In Hosp., Sept. 1916; Capt., Royal Army Med. Corps, Colorado Springs; Visit. Staff, Surg. Services, Glockner Hosp. & Sanatorium, Bethel Hospital, Colorado Springs, Colorado.

WRIGHT, MARY

A.B., Vassar, 1911; M.D., J.H.M.S., 1917; Med. H.O., P.B.B.H., July 1, 1917-Sept. 17, 1918; H.O. (Pediatrics), M.G.H., Oct. 1918-April 1919; H.O., St. Louis Children's Hosp., May 1, 1919-Sept. 1, 1919; Asst. Res., St. Louis Children's Hosp., Sept. 1, 1919-May 1, 1920; Grad. Asst., Children's O.P.D., M.G.H.; Mem. Visit. Staff, O.P.D., M.G.H.; Visit. Phys., N. E. Hosp. for Women & Children; Phys., Newton Centre, Mass.

Wulffaert, Franz Réné

B.A., Brussels, 1906; B.S., *ibid.*, 1907; M.D., *ibid.*, 1912; Asst. Phys., St. John's Hosp., Brussels, 1913; Res. Anaesthetist, St. Mary's Hosp., London, Eng., 1915; *Pathol. H.O.*, *P.B.B.H.*, *Jan. 15*, 1918–July 1, 1918; Res. Pathol., P.B.B.H., July 1, 1918–March 31, 1919; Asst. Pathol., H.M.S., 1918–19; Asst. Surg. (Gynecology), St. John's Hosp., Brussels.

*Young, William W.

A.B., Randolph-Macon, 1909; M.D., J.H.M.S., 1913; Med. H.O., P.B.B.H., July 1, 1913-Feb. 14, 1914.

* Record possibly incomplete, no reply received.

Visiting Physicians and Surgeons Pro Tempore

- Dr. Frank Billings M.D., Northwestern Univ., 1881; M.S., *ibid.*, 1890; Professor of Medicine, University of Chicago; Visiting Physician from May 15 to May 20, 1916.
- Dr. Albion Walter Hewlett B.S., Univ. of Calif., 1895; M.D., J.H.M.S., 1900; Professor of Medicine, Leland-Stanford Jr. Univ., San Francisco; Visiting Physician, May 1 to May 4, 1915, and Jan. 2 to Jan. 8, 1916.
- Dr. Henry Robert Murray Landis
 A.B., Amherst, 1894; M.D., Jefferson Med. Coll., 1897; Director Clinical and Sociological Departments, Henry Phipps Institute, Philadelphia, Pa.; Visiting Physician, January 18 to January 25, 1919.
- Dr. Dean Lewis
 A.B., Lake Forest Univ., 1895; M.D., Rush Med. Coll., 1899; Professor of Surgery (Elect.) of the Univ. of Chicago; Visiting Surgeon, March 15 to March 24, 1920.
- Dr. Thomas Lewis
 M.D., Univ. College, London, England, 1906; Phys., University College,
 London, England; Visiting Physician, October 26 to November 2, 1914.
- Dr. Warfield T. Longcope A.B., J.H.U., 1897; M.D., J.H.M.S., 1901; Professor of Medicine, Columbia University, New York; Visiting Physician, January 13 to January 20, 1917.
- Dr. William S. Thayer
 A.B., Harv., 1885; M.D., H.M.S., 1889; LL.D., Washington Coll., 1907;
 Professor of Medicine, Johns Hopkins University; Physician-in-Chief,
 Johns Hopkins Hospital; Visiting Physician, November 14 to November 21,-1913.

Officers of the Institution, 1921

President

CHARLES P. CURTIS

Treasurer

EDMUND D. CODMAN

Secretary

Laurence H. H. Johnson

MEMBERS OF THE CORPORATION

Appointed		
Jan. 5, 1921	*WILLIAM AMORY 341 Beacon St., Bo	ston
Feb. 7, 1918	Charles F. Choate, Jr 30 State St., Bo	ston
May 8, 1902	Edmund D. Codman 27 Kilby St., Bo	ston
Apr. 15, 1915	Charles P. Curtis 71 Ames Building, Bo	ston
Dec. 11, 1919	Louis A. Frothingham . 911 Barristers Hall, Bo	ston
June 16, 1909	*Irvin McD. Garfield 30 State St., Bo	ston
Feb. 7, 1918	Francis L. Higginson, Jr 44 State St., Bo	ston
May 8, 1902	Henry S. Howe 89 Franklin St., Bo	ston
May 8, 1902	Walter Hunnewell 87 Milk St., Bo	ston
May 8, 1902	Laurence H. H. Johnson . 27 Kilby St., Bo	ston
May 8, 1902	WILLIAM R. TRASK 40 State St., Bo	ston
Feb. 12, 1920	WILLIAM H. WELLINGTON . 93 Franklin St., Bo	ston

STANDING COMMITTEES OF THE TRUSTEES

Building Committee

WILLIAM AMORY, Chairman
CHARLES P. CURTIS
WILLIAM H. WELLINGTON
LAURENCE H. H. JOHNSON
JOSEPH B. HOWLAND, M.D., Secretary

^{*} Appointed by the Governor of the Commonwealth under an Act approved May 8, 1909.

OFFICERS OF THE INSTITUTION

Auditing Committee

WILLIAM R. TRASK

Committee on Finance

Edmund D. Codman Walter Hunnewell Henry S. Howe Laurence H. H. Johnson

Committee on Nominations

CHARLES P. CURTIS EDMUND D. CODMAN

Committee on Rules

CHARLES P. CURTIS EDMUND D. CODMAN IRVIN McD. GARFIELD

VISITING COMMITTEE FOR 1920

Walter Hunnewell	•	•				•	•		•		•	January
CHARLES P. CURTIS .												
HENRY S. Howe				•		•			•		•	March
John P. Reynolds .						•		•	•		•	April
LAURENCE H. H. JOH:												
IRVIN McD. GARFIELD	D				•						•	June
IRVIN McD. GARFIELI)										•	July
WILLIAM R. TRASK .											•	August
Francis L. Higginson	Ι,	JR.	•									September
EDMUND D. CODMAN											•	October
CHARLES F. CHOATE,	JR	•	•									November
WILLIAM H. WELLING	то	N		•	•	•	•	•	•	•	•	December

VISITING COMMITTEE FOR 1921

Walter Hunnewell	January
Francis L. Higginson, Jr	February
Henry S. Howe	March
CHARLES F. CHOATE	April
Laurence H. H. Johnson	May
CHARLES P. CURTIS	June
EDMUND D. CODMAN	July
WILLIAM R. TRASK	
IRVIN McD. GARFIELD	September
WILLIAM H. WELLINGTON	October
William Amory	November
Louis A. Frothingham	December

MEDICAL ADVISER TO CORPORATION

Appointed

July 9, 1914 Frederick C. Shattuck, M.D.

EXECUTIVE COMMITTEE OF THE STAFF

HENRY A. CHRISTIAN, M.D. HARVEY CUSHING, M.D. S. Burt Wolbach, M.D. JOSEPH B. HOWLAND, M.D., Secretary

ADMINISTRATIVE DEPARTMENT

Superintendent

Service began

May 1, 1919 Joseph B. Howland, M.D.

Assistant Superintendents

Feb. 1, 1915 George H. Stone, M.D.

July 1, 1919 Andrew Nichols, 3d, M Feb. 1, 1921 Leroy E. Parkins, M.D. Andrew Nichols, 3d, M.D. to Feb. 1, 1921.

Executive Assistant

June 11, 1919 MILDRED M. HUBBARD, R.N.

BOARD OF CONSULTATION

Appointed

WALTER B. CANNON, M.D., Consulting Physiologist Mar. 25, 1912

Mar. 25, 1912 OTTO FOLIN, Ph.D., Consulting Chemist

EDWIN E. JACK, M.D., Consulting Ophthalmologist. June 13, 1918

Jan. 13, 1916 WILLIAM H. POTTER, D.M.D., Consulting Dental Surgeon

MEDICAL DEPARTMENT

Service began

HENRY A. CHRISTIAN, M.D., Physician-in-Chief May 1, 1912

July 1, 1912 CHANNING FROTHINGHAM, M.D., Physician

FRANCIS W. PEABODY, M.D., Physician Dec. 9, 1915

Sept. 1, 1915 I. CHANDLER WALKER, M.D., Associate in Medicine

GEORGE P. DENNY, M.D., Associate in Medicine

July 1, 1915 July 1, 1915 JAMES P. O'HARE, M.D., Associate in Medicine

NATHANIEL K. WOOD, M.D., Associate in Medicine Dec. 12, 1912

CHARLES W. McClure, M.D., Associate in Medicine Feb. 13, 1919

SAMUEL A. LEVINE, M.D., Associate in Medicine Aug. 8, 1919

Donald J. MacPherson, M.D., Associate in Medicine Cyrus C. Sturgis, M.D., Resident Physician Sept. 12, 1919

Apr. 15, 1920

Sept. 1, 1919 JOSEPH T. WEARN, M.D., Assistant Resident Physician

July 1, 1920 JAMES WYNN, M.D., Assistant Resident Physician

Oct. 1, 1920 IRWIN C. SCHUMACHER, M.D., Assistant Resident Physician

OFFICERS OF THE INSTITUTION

SURGICAL DEPARTMENT

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Sept. 1	l, 1912	HARVEY	Cushing,	M.D.,	Surgeon-	-in-Chief
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Oct. 1, 1912 DAVID CHEEVER, M.D., Surgeon

May 1, 1912 John Homans, M.D., Surgeon

June 19, 1916 WILLIAM C. QUINBY, M.D., Urological Surgeon

Nov. 17, 1914 HILBERT F. DAY, M.D., Associate in Surgery

Oct. 1, 1920 Percival Bailey, M.D., Associate in Surgery

Oct. 9, 1919 GILBERT HORRAX, M.D., Associate in Neurological Surgery

Jan. 8, 1920 Thomas H. Lanman, M.D., Associate in Urological Surgery

Aug. 1, 1919 Elliott C. Cutler, M.D., Resident Surgeon

Dec. 20, 1919 Howard Fleming, M.D., Assistant Resident Surgeon

July 1, 1920 Roger C. Graves, M.D., Assistant Resident Surgeon

June 15, 1920 CHARLES E. LOCKE, JR., M.D., Assistant Resident Surgeon

July 1, 1920 Francis C. Newton, M.D., Assistant Resident Surgeon

PATHOLOGICAL DEPARTMENT

Service began

Dec. 1, 1916 S. Burt Wolbach, M.D., Pathologist

July 1, 1920 Victor C. Jacobson, M.D., Resident Pathologist

ROENTGENOLOGIST

Oct. 15, 1919 LAWRENCE REYNOLDS, M.D.

DENTAL SURGEON

Jan. 22, 1920 VAROZTAD H. KAZANJIAN, D.M.D.

MEDICAL HOUSE OFFICERS

Service began		Service ended
Mar. 15, 1919	 Howard Burr Jackson, M.D	April 1, 1920
April 15, 1919	 ROBERT LEV NOVY, M.D	April 1, 1920
July 1, 1919	 JAMES JOSEPH LYNCH, M.D	July 1, 1920
July 1, 1919	 EUGENE CURTIS PECK, M.D	July 1, 1920
Sept. 15, 1919	 LEONARD TOMB DAVIDSON, M.D	Nov. 1, 1920
Sept. 16, 1919	 Charles Thomas Nellans, M.D.	Nov. 1, 1920
		Service will end
Dec. 15, 1919	 RICHARD MOORE McKEAN, M.D.	Mar. 1, 1921
Dec. 16, 1919	 DAVID COLE WILSON, M.D	Mar. 1, 1921
Apr. 1, 1920	 SEYMOUR FISKE, M.D	July 1, 1921
Apr. 1, 1920	 Edward A. Greenspon, M.D	July 1, 1921
July 1, 1920	 HAROLD HIXON BRITTINGHAM, M.D.	Nov. 1, 1921
July 1, 1920		Nov. 1, 1921
Oct. 15, 1920	 Edward Stanley Emery, Jr., M.D.	Mar. 1, 1922
Oct. 16, 1920	 Samuel Becher Grant, M.D	Mar. 1, 1922
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SURGICAL HOUSE OFFICERS

	SUR	GICAL HOUS	E OFFICERS		
Service began				Serv	ice ended
Nov. 15, 1918 Dec. 1, 1918 Mar. 15, 1919 Mar. 16, 1919 June 16, 1919 Aug. 13, 1919		Leroy Edward Arthur Gordo: Francis Chandi Charles Haroi	Kebabjian, M.D. Parkins, M.D. N Boggs, M.D. LER NEWTON, M.D. LD JAMESON, M.D. GAN, M.D.	Mar. Mar. July July Nov. Nov.	1, 1920 1, 1920 1, 1920 1, 1920 1, 1920 1, 1920
				Service	will end
Oct. 15, 1919 Oct. 27, 1919 Feb. 15, 1920 Mar. 1, 1920 July 1, 1920 July 1, 1920 Oct. 15, 1920 Oct. 15, 1920		ALEXANDER THOMELICATION ALBERT HOWELICE E. B. GLEN EVAN CH WAYNE ADDISON WILLIAM EUSTI	E PRICE, JR., M.D. MAS ORMOND, M.D. L BREWSTER, M.D. FOLEY, M.D. ELEY, M.D. YOAKAM, M.D. S BROWN, M.D. ELL HARBIN, M.D.	Mar. Mar. July July Nov. Nov. Mar. Mar.	1, 1921 1, 1921 1, 1921 1, 1921 1, 1921 1, 1922 1, 1922
	PATHO	LOGICAL HO	OUSE OFFICER		
July 6, 1920		EARL R. TEMPI	LETON, M.D.		
		FICER IN X-	RAY DEPARTME Smith, M.D.	NT	
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	s	CHOOL OF	NURSING		
		uperintendent of acipal of the Scho			
Service began					
July 12,	1912		CARRIE M. HALL	, R.N.	
	Assi	stant Superinten	dent of Nurses		
Sept. 30,	1920		Mabel McVicke	r, R.N.	
		Instructor in	Theory		
Sept. 3, 1	1920		Mildred Constan	NTINE, F	ł.N.
		Instructor in 1	Practice		
Sept. 3, 1	920	162	Helen M. Blaisd	ELL, R.	N.

OFFICERS OF THE INSTITUTION

Supervisors

Oct. 9, 1916 Jan. 26, 1921 Nov. 1, 1918 Nov. 1, 1920	Anna G. McKeon, R.N. Eunice M. Woodman, R.N. Marguerite Robb, R.N. Lila M. Dalrymple, R.N.				
	Night Supervisor				
April 19, 1920	Nellie V. Porter, R.N.				
	Social Service Worker				
Aug. 17, 1914	Alice M. Cheney, R.N.				
Dietitian					
May 15, 1919	Octavia I. Hall				
	Apothecary				
Dec. 2, 1912	HARRY H. COMAN				
•	Clerk .				
April 29, 1912	LIDA E. CRAWFORD				
	Housekeeper				
Nov. 1, 1912	Elizabeth M. Packard				
Chief - Mechanical Departments					
Oct. 21, 1911	John A. Aitken				



FORM OF BEQUEST

I give and bequeath to the Peter Bent Brigham Hospital, a corporation established under the laws of the Commonwealth of Massachusetts, the sum of dollars, the same to be used for the furtherance of its charitable work.

